#### SPC/FFA REGIONAL PURSE SEINE FISHERIES

### **Trip Preparation Page**

A few words of preparation: Remember it is the responsibility of contracted observers to ensure they are properly prepared for their trips – to be in good health, good mind, up to date with current requirements and to have all necessary **forms** and equipment.

At the start of each trip it is imperative to check that all the following items are available for the trip:

Tick a box only when you are sure you have that item.

N.B.:
Forms version should be "Revised Dec 2016"

1.	One of these <b>Observer Workbooks</b> for every 35 days at sea.	
2.	Sufficient Catch Monitoring Forms PS-4's for the trip (30 sheets per pad)	
3.	Extra pads of <b>PS-2</b> , <b>PS-3</b> , <b>GEN-5</b> forms as required (30 sheets per pad)	
4.	NEW: Trip Report Booklet (one per trip)	
5.	Sufficient <b>Observer Journals</b> (normally 30 pages per Journal)	
6.	Two blank <b>notebooks</b> (preferably waterproof)	
7.	One box of pens and pencils (should contain at least 10 X @B pencils, 2 X erasers, 1 X pencil sharpener, paper clips, 2 X pens, 2 X waterproof felt pens, 1 small straight-edge ruler)	
8.	One calculator	
9.	One set of fish-measuring callipers / and or measuring board.	
10.	A suitable chart	
11.	Your personal requirements	
12.		
13.		
14.		
15.		

Being prepared from the start will make a trip easier, more pleasant and far more effective.



### OBSERVER PROGRAMME FIELD DATA COLLECTION INSTRUCTIONS

(Read these regularly)

# Ensure that your observer trip I.D. number\* is recorded on every form, your journal and any other sheets containing information relative to the trip.

- 1. Please write clearly unreadable data are of no use. Use a sharp pencil and keep a spare sharp pencil handy. For waterproof paper and plastic boards write with a soft (#2 or #2B) pencil. An eraser should be used to correct errors on the day of entry only.
- 2. If using a camera the first photograph on each film should be of a piece of paper with the observer's trip ID number written in very large numbers, with the date the photograph is taken written underneath. For a clear picture keep the camera at least 1.5 metres away from the paper. Use a waterproof felt-tip pen to record the observer trip ID number on the metal casing of any films used or on the outside of disposable cameras used.
- 3. Always carry a notebook (preferably waterproof) and pencil with you on deck.

  Note information as it happens and transfer to forms or journal once inside.

  After information is in journal draw a single neat line through notebook entry to show it is done.
- 4. Unless otherwise stated, make only one (the best) choice when using the codes to record data.
- 5. Everything you write on the forms should be <u>printed</u>. Always be conscious about being neat.
- 6. Number the pages in your journal. Think of something to write in it every day. Don't forget to start each day's entries with the date.
- 7. Notes and comments are good but, on forms, restrict these only to the areas for that purpose. If there is not enough space to write all that is useful or interesting on the form, make a short note and continue in the journal. Record journal page number next to the short note on the form.
- 8. Observe and record data accurately. Extra notes and explanations should be simple and clear. Record data as it happens. All data should be entered the same day trust nothing to memory.
- 9. Make sure forms are filled in the right order. If a form is accidentally left blank and one after it is filled instead, do not go back to fill the blank form later. If a blank form is discovered between filled forms, draw a thick line diagonally across the page and write "missed" on it.
- 10. Do not make any changes or corrections to data after the day it is recorded. If a mistake is discovered later, draw a neat circle around it and write:

"Mistake - correct entry is <u>???</u> (whatever it is). See journal page No. <u>??</u>" at the top of the form. Comment in the journal why it was a mistake and how it was discovered.

11. All compass readings are to be degrees true. Do not use magnetic readings. (Note: true north is 000 degrees).

#### \* UNDERSTANDING OBSERVER TRIP ID NUMBERS

The <u>observer trip ID number</u> is issued by the authority that authorised the observer trip. It is unique to one ever single observer trip. It should be recorded on any piece of paper with information related to that trip so that no matter where that paper finishes up it can always be traced to that specific trip.

If an observer from a National Observer Programme works in a regional programme for a trip or two, then the observer should use the Observer Trip ID Number provided by the regional programme and not one from the National Programme. If a national programme insists on recording their number (as occasionally happens) record it on the front of this workbook only - in the second (smaller) space provided for a second trip ID number. BUT record the correct regional programme number on all other forms etc., as usual.

N.B.: all observer trips in the region are recorded on the OFP regional database using both the number given and a number made up of: 1) a unique 3-letter code issued to every observer in the region, followed by a space; 2) then two digits for the year, followed by a dash; 3) then two digits that show the number of observer trips that the observer has started that year.

(For example, Albert Einstein, starting his ninth trip in the year 2001 would have the observer trip ID number: ABC 01-09.) This is also the format used by several national programmes. It has the advantage that an observer knows these things and so knows the trip ID number without having to ask. If the number given does not use this format and the second space is not otherwise needed for a differently formatted number given by a National Programme, then the observer could record this format in the second space.

### SPC/FFA REGIONAL OBSERVER OBSERVER PLACEMENT MEETING RECORD

REV DEC. 2016

TRIP DETAILS

			_		
OBSERVER NAME	TRIP START LOCA	TRIP START LOCATION		TRIP START DATE (YY/ MM/DD)	
OBSERVER TRIP ID NUMBER	ESTIM ATED TRIP	ESTIMATED TRIP END LOCATION		VESSEL GEAR	
VESSEL NAME		FLAG	CALIPER SERIAL NUMBER	UVI and / or IRCS	
VESSEL SIZE: circle to indicate	< 16 metres	16-25 meters	26-39 meters	40-65 meters	> 65 meters
Personal Lifesaving Beacon (PLB) Y/N	PLB Make:		Comments		
	PLB Model:				

#### OBSERVER PLACEMENT CHECKLIST

A Fisheries Authority Representative/Placement Officer is to assist the observer, before and during boarding, and oversee that information is recorded and actions taken as prescribed in this form. Please intial the space at the left of each numbered item to show it has been completed.

	Initial :	Completed.  Placement Officer to initial when they have:
1		Set up the placement meeting
2		Assisted the observer with their personal requirements before boarding
3		Checked that the observer has been assigned appropriate accommodation and an area to store their equipment
4		Carried out a vessel safety check in the presence of the observer and Captain
5		Ensured that the Captain receives and understands the attached description (check-list) of standard observer duties and vessel obligations
6		Ensured that both parties are informed of their rights and responsibilities under CMM 2008-01 (Show and, if necessary, supply copy)
7		Reminded the observer that there is no obligation to do extra duties, but it is very much appreciated if they can help out when appropriate.
8		Reminded the Captain and Observer of importance of cooperation
9		Supplied or informed the Captain of the "Vessel on Observer Report" form
10		Informed the Captain and Observer than an observer-debriefing meeting will take place immediately upon return to port at completion of trip
11		Ensured observer's compulsory 2-way communication device is tested and working.
	Initial :	Observer to initial when they have:
12		Clearly described any special sampling requirements to the Vessel Captain
13		Has been present at the Vessel Safety Check and have agreed to board the vessel
14		Confirmed that they are medically fit, informed the Captain of any special medical issues (prescription medication etc); and supplied contact details for their next-of-kin
15		Understood that they must report all gifts in their trip report.
16		Understood that in line with their Observer Code of Conduct they should not drink alcohol at any point during the entire trip.
17		Ensured observer's compulsory 2-way communication device is tested and working.
	Initial :	Vessel Captain to initial when they have:
18		Read and understood the "Obligations of the Vessel Operators to Observers"
19		Shown the observer all current and valid license certificates
20		Shown the observer the location of their life jacket
21		Informed the observer of all safety regulations, procedures and muster stations
22		Shown the observer which electronic bridge equipment is used and which is not used
23		Shown the observer how to obtain position and UTC time and date from the onboard GPS and plotter to which they have access to during the trip
24		Understood that offering excessive alcohol to observers may interfere with their work duties and general conduct; and be aware that many observers are required by their programmes' Code of Conduct not to drink alcohol at any time while onboard the vessel
25		Ensured observer's compulsory 2-way communication device is tested and working.

#### Rev. DEC 2016 Notes for the VESSEL CAPTAIN on the OBSERVER PLACEMENT

An observer's primary function is to collect reliable and accurate information for scientific, management and compliance purposes. Observers collect data on; catch and effort, size composition, position, fishing methods, fisheries interactions, environmental impacts, processing and destination of the fish (including discards) and any other matters that may assist fisheries managers verify information for the purpose of administering fisheries regulations, license requirements and access agreements. The observer duties and their obligations, along with the vessel operator's obligations to the observer are described below. A thorough understanding of these by both the observer and the vessel operator will help ensure an effective working arrangement while on board.

→ Vessel Captain please read and initial on the right when the obligations of both parties are understood Capt. Initals

	Vessel Captain please read and initial on the right when the obligations of both parties are understood Ca	pt. Initals
	OBSERVER'S DUTIES AND OBLIGATIONS	
1	Must promptly report any harassment they were subjected to (including a written report to their fisheries authority representative or when not available the nearest Police station)	1
2	May take, measure and retain samples or specimens of any fish	2
3	May observe and record details of any incidental take, including the recording of set position information	3
4	May record position, activity and identification details of other vessels sighted	4
5	May use communications and other equipment of the vessel but should get permission from the Captain before using it	5
6	Should not be involved in the fishing operations but may assist in normal vessel housekeeping duties	6
7	Should not stand watch on the vessel	7
8	May take photographs of the fishing operations, including fish, gear, equipment, documents, charts and records, and remove from the vessel such photographs or film as was taken or used onboard	8
9	Observers should not drink alcohol at any point during the trip in accordance with Observer Code of Conduct.	9
10	Observer must sign for and report any gifts they have received from the vessel during the trip.	10
	OBLIGATIONS OF THE VESSEL OPERATORS TO THE OBSERVER (CMM 2008-01)	
11	Ensure vessel personnel do not assault, obstruct, resist, refuse boarding to, delay, intimidate or interfere with an observer performing observer duties	11
12	Allow access to the bridge, communications and navigation equipment	12
13	Instruct observer on use of vessel communications equipment to receive and transmit message with the shore, Fishery Authority and other vessels	13
14	Assist observer as requested, in recording accurate vessel position using vessel navigation and positioning equipment	14
15	Provide access to areas where fish are held, processed, weighed or stored	15
16	Allow observer access to document and records, including all logbook for purpose of inspection and copying	16
17	Allow observer to remove samples	17
18	Ensure vessel personal do not assault, obstruct, resist, refuse boarding to, delay, intimidate or interfere with an observer performing observer duties	18
19	Show the charge appropriate young active procedures and location of prices active acquirment (life rates	19
20	Advise the observer of dangerous work areas and instruct the observer on how to minimise exposure (e.g.	20
21	Provide the observer with food, clean bunk space large enough for a national observer and any necessary medical facilities and treatment in the course of the observer trip and up to two full days after landing in port.	21
22	Provide appropriate space for the storage of observer equipment, supplies and samples	22
23	Vessel operators and owners should be fully aware that any instance of reported observer harassment will be fully investigated and, if warranted, legal action will follow, which may include civil and criminal penalties	23
	Inform vessel Captain of where he can get a copy of the Vessel Report on the Observer	

# SPC/FFA REGIONAL OBSERVER FORM SUP-1 (pg2) OBSERVER PLACEMENT MEETING RECORD

PEV	DEC. 2016	AOLINEI III		<u> </u>	
	BEC. 2010 ERVER NAME	VESSELNAME			OBSERVER TRIP ID NUMBER
	V	ESSEL SAFETY		K LE ONE	COMMENTS
1	VESSEL SURVEY DOCUMENTATION (Curre	ent)	Yes	No	COMMITTEE
2	CORRECT SIZE PERSONAL FLOATATION DEVICE		Yes	No	
3	APPROVED LIFERAFT OR LIFEBOATS UNDER CU AND ADEQUATE FOR NUMBER OF CREW		Yes	No	
4	EPIRBS (Current Survey)		Yes	No	
5	DISTRESS SIGNALS AND FLARES		Yes	No	
6	FIRE FIGHTING EQUIPMENT IN GOOD ORE	DER	Yes	No	
7	FIRE EXTINGUISHERS (Current Checked)		Yes	No	
8	MARINE RADIO HF SSB or SUBITUTE COMMUNICATION	ATIONS	Yes	No	
9	NAVIGATION LIGHTS / VESSEL LIGHTS (Wo	orking Order)	Yes	No	
10	SOUND PRODUCING DEVICES OR BELL		Yes	No	
11	REGISTRATION DOCUMENTATION IN ORD	ER	Yes	No	
12	OTHER WORK RELATED VESSELS ON BO COULD BE UTILISED IN CASE OF EMERGE		Yes	No	
13	NAUTICAL CHARTS AND NAVIGATION AIDS (GP	S/RADAR)	Yes	No	
14	FIRST AID EQUIPMENT		Yes	No	
15	SANITATION		Yes	No	
16	PHONE		Yes	No	
	EMAIL / FAX		Yes	No	
18	INSURANCE FOR OBSERVER WHILST ON	BOARD	Yes	No	
19	VESSEL INSURANCE		Yes	No	
20	ROOM FOR CREW AND OBSERVER TO WO	RK SAFELY	Yes	No	
	o: record the reasons here and continue on to another  KNOWLEDGED (Observer Placement Meeting)			and back read	d/ initaled/ accepted)
	OBSERVER NAME		SIGNAT	URE	DATE
VES	SEL CAPTAINNAME		SIGNAT	URE	DATE
FIS	HING MASTER (if any)				
RE	NAME FISHING AUTHORITY EPRESENTATIVE		SIGNAT	URE	DATE
	NAME TERPRETER		SIGNAT	URE	DATE
ilN	(if any)		0.0		
RE	NAME / POSITION  FISHING  AUTHORITY  EPRESENTATIVE		SIGNAT	UKE	DATE
	POSITION		SIGNATUR	RE	DATE

#### EXPLANATION ON VSC REQUIREMENTS

The fields in this form may be used to check safety, on whether an observer is safe to board the vessel.

- 1. **VESSEL SURVEY DOCUMENTATION CURRENT** Fishing Vessels and support vessels operating in the WCPFC must comply with their Flag State regulations and/or the Code of Practice for Safety. Ship surveys including condition, safety and security aspects of hull, machinery and on board safety equipment must be available to be viewed.
- **2. CORRECT SIZE PERSONAL FLOATATION DEVICE AVAILABLE** Life Jackets must be approved types and in good serviceable condition, Life Jackets of suitable sizes must be readily accessible for the observer and all crew. Life jackets will not be stored away or locked in cupboards or rooms.
- **3. APPROVED LIFE** -Life rafts must be currently in survey and be adequate to carry the amount of crew and observer.
- **4. EPIRBS** International Standard 406 MHz EPIRB. The signal frequency (406 MHz) has been designated internationally for use only for distress. Check to see the frequency number and position of these EPIRBS, a few vessels may have the older relatively common type of 121.5/243 MHz emergency beacons, these became obsolete in late 2008.
- **5. DISTRESS SIGNAL AND FLARES.** Vessels should have on board appropriate pyrotechnics devices that will suitably operate in both day and night emergency situations.
- **6. FIRE FIGHTING EQUIPMENT** Fire fighting must be readily available, be able to work and be currently serviceable. Note that some small vessels may only have fire extinguishers on board.
- **7. MOUNTED FIRE EXTINGUISHER,** Fire extinguishers must be readily available and be of the correct type. Portable extinguishers require periodic maintenance therefore the last inspection date when last tested or refilled should be available. All must be currently serviceable and if possible should be checked to ensure extinguishes have not been fully or partially discharged.
- **8. MARINE RADIO HF SSB(WORKING ORDER)** Marine SSB (Single Side Band) is a means of communications for many fishing vessels. The radio must be capable of transmitting and receiving frequencies used for emergency marine communications as agreed by the International Telecommunication Union (ITU) or by the Flag State of the vessel.
- **9. NAVIGATION LIGHTS AND VESSEL LIGHTS** Vessels must be able to display international standard navigation lights between sunset and sunrise and in conditions of reduced visibility. Internal and external vessel lighting must be fully operational. In the case of power failure, battery operated safety lights must be appropriately placed to ensure a safe exit from the vessel.
- **10. SOUND PRODUCING SIGNALS OR BELLS** Vessels must carry a sound producing device (whistle, horn, siren or bell) capable of a prolonged blast or ringing for distress signalling purposes.
- **11. REGISTRATION DOCUMENTATION IN ORDER** Flag State Registration documentation papers must be on board and available to be viewed and must show registration number, boats name, country and port of registration.
- **12. OTHER WORK RELATED VESSELS** Many vessels have auxiliary vessels that can be used in emergency situations. Note these.
- **13.** .NAUTICAL CHARTS AND NAVIGATION AIDS Vessel must have a set of appropriate, up to date nautical charts. Check to ensure that the Radar, GPS and any other navigational equipment is in good order and functioning.
- **14. FIRST AID EQUIPMENT** The vessel must have adequate first aid facilities with current "use by dates" on all apparatus, drugs, dressings and other first aid paraphernalia.
- **15. SANITATION** The vessel should have clean, well maintained sanitation and bathing facilities. Depending on the size of the vessel, observers may experience a lack of these facilities on board.
- **16. PHONE** if the vessel has a satellite phone note the number for future reference.
- 17. EMAIL/FAX If the vessel has Fax or Email system note the numbers for future reference or emergencies.
- 18. INSURANCE FOR OBSERVERS ON BOARD Observers must be covered by insurance before making a boarding
- 19. VESSEL INSURANCE Check if vessel has insurance
- **20. ROOM FOR OBSERVER AND CREW TO WORK SAFELY.** There must be adequate room on board the deck for the Observer and Crew to work in such a manner, so as to not hinder each other in their respective work duties.

# Changes to the Purse Seine Observer forms agreed AT THE 10<sup>th</sup> Tuna Fishery Data Collection Committee (DCC) Dec 2016<sup>1</sup>

(VERSION 2 – FURTHER CHANGES TO PS-3 ONLY)

OBSERVER	SPC/FFA REGIONAL PURSE SEINE	FORM BS 1 (pg 1)
PROGRAMME:	GENERAL INFORMATION	<b>FORM PS-1</b> (pg 1)

#### Date of revision

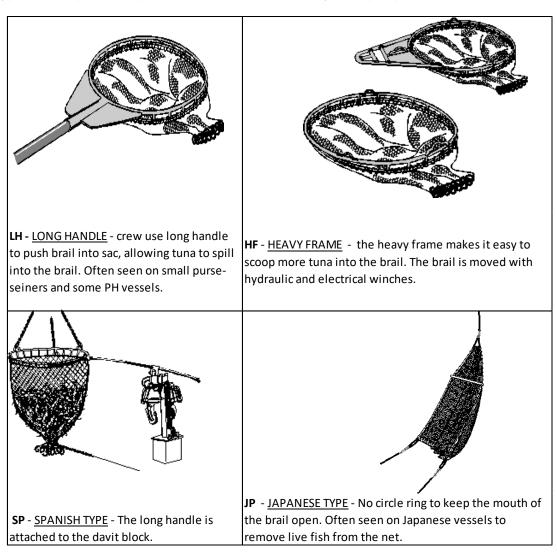
The date of revision of the form was changed to Dec 2016.

#### Modified data form

The **AIS data field** has been dropped from the top of the Electronics to just above the VMS data fields.

#### New data fields

**Brail Type:** Previously observers were asked to describe the brail types on the PS-1 form. The information collected by observers has now been used to separate the different brail types into four distinct categories. These are shown below. Use the codes to fill in the brail type data field. If you think you have seen a different type of brail please report and describe this this in your trip report.



<sup>&</sup>lt;sup>1</sup> Observers are strongly encouraged to read the form instructions to better understand what data needs to be recorded. These notes are only to help observers identify the changes that were made to the forms and provide graphics.

mT: Record the <u>capacity</u> of the brail in **metric tonnes.** The capacity of a brail means the total amount of fish (tuna) it can hold when full. Normally, the brail with the largest capacity should be recorded as Brail 1. If there is a second brail and it has a smaller (or equal) brail capacity, record this as Brail 2. If the capacity of the brail is deliberate changed during the trip (i.e. a new netting panel added to the brail), then record this as Brail 3. See 'Brail Change Comments' below.

**Live Fish Brail Y / N:** Circle "Y" if the brail is used at any stage during the trip to specifically bring live fish on board. Such live fish (tuna) will normally be sold for the sashimi or katsuobushi (flaked fish) market and will be refrigerated differently to the rest of the tuna (standard brine wells). Indicate if the brail was specifically used to remove live fish from the net during any set on the PS-4 form. Separate any live fish brailing from non-fish brailing on the PS-4 form by using separate sampling types (see PS-4).

**Brail Change Comments**: Use this data field to add any comments you have on brail changes. Brail change refers to changes in the capacity of the brail (see above). If the capacity of the brail is deliberate changed during the trip (i.e. a new netting panel added to the brail increasing the capacity, or a section of the netting was removed due to a large hole decreasing the capacity of the brail) it is recognised as a new brail and all the details of the brail (type, new capacity, live fish brail) should be recorded as Brail 3. If Brail 1 was changed there is no need to remove the details of Brail 1, with an eraser etc. Remember to continue with any new brail numbering through to your PS-4.

Adding the 'date of the brail change' into the "Brail Change Comments" data field will be helpful and/or the journal page where it is further described.

#### Modified data fields

**GT or GRT:** Observers are asked to record the **Gross Tonnage (GT)** of the vessel. This information can be found on the vessel paperwork / licensing document. **GT** is the current international standard for vessel volume and should be available for most purse-seine vessels at this stage. However, some older vessels may have been assigned a **Gross Register Tonnage (GRT)** when built. Observers are asked to record GT for vessels, unless they can only find GRT on the paperwork. In this case circle GRT and record the value. GT and GRT are both units of vessel volume, but they are calculated differently.

#### **Under Communication and Information Services:**

**'Empty Data Field':** Previously there was an empty data field beside the satellite weather monitor data field. Some observers found it annoying and wondered if something should be filled in. The answer was no – nothing needed to be filled. To resolve the problem the empty data field has been absorbed into the mobile/cell phone cell data field.

- Clarifying that a **mobile phone** is also a **cell phone** was requested by the US territories and most especially for the US fleets. The data field was modified.
- Other the second line for information services started with the word 'Other'. It was suggested that the word 'websites' was more appropriate and was edited to reflect this. Observers are encouraged to write the address of the website supplying the fishery information service and the indication www (world wide web) has been added to reflect this.

#### New codes

**Usage Codes: OTH – other please specify.** Observers have questioned the most appropriate 'usage code' when they have to record the usage of 'buoys' (GPS and echo sounding buoys) during the FAD closure period. They suggested that none of the 2014 usage codes were appropriate to indicate that the buoys were not used during the FAD closure period, but that they are used at most other times. The decision was made to add a new code 'OTH – other please specific' to cover for this.

# SPC/FFA REGIONAL PURSE SEINE OBSERVER GENERAL INFORMATION

FORM PS - 1 (pg 2)

#### Date of revision

The date of revision of the form was changed to Dec 2016.

#### Modified form/extra pages

**New workbook sheets** (crew list, well pattern, net plan). To improve the management of observer data, new blank pages will be placed at the back of the workbook for observers to attach loose information sheets). This will improve the scanning and filing of these pages, so observers' work will not be lost. This is mentioned under the PS-1 page 2 form as the well pattern can be drawn at the bottom of the PS-1 (pg 2) form.

#### Instruction change

**EPIRBs** the instructions will be modified to inform observers that there is no need to record information on EPIRBs that are hard to access, most especially inside life-rafts. A note can be made in the comments section of the form to highlight the presence of EPIRBs that were not accessible.

#### Modified data fields

**Comments or Drawings of Well Pattern:** A minor data field edit was made to include the missing 's' on the word drawing.

#### SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

#### Date of revision

The date of revision of the form was changed to Dec 2016.

#### Instruction change

**Radio buoys:** The DCC meeting agreed that radio buoy will be the overall phrase or 'catch all' term when referring generally to all types of buoys (i.e. GPS, echo sounding etc.)

#### Modified codes

The **activity and helicopter codes** were changed. The wording "no fishing" was removed from codes 11, 12 and 13. This is consistent with the fact that a PS vessel is nearly always fishing as it checks its long range echo-sounding or sonar buoys. The following codes were amended.

- 11 Drifting at day's end
- 12 Drifting and tied with floating object
- 13 Other reason please specify

#### New code

A <u>new activity code</u> was added. The new code '18 **Drifting – No fishing**'. As an example the new code can be used by observers when the vessel is alongside another vessel and transfer crew etc. There may be other uses for this new code during the trip.

#### SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

#### Date of revision

The **date of revision** of the form was changed to Dec 2016.

#### Modified data form

**Species of Special Interest.** There are some big changes with how SSIs will be recorded on the PS-3 form.

<u>Please note that the PS-3 form will now cater for all species of special interest landed on deck and any</u> interactions with the primary gear (net) that do not result in a landing.

When we talk about primary gear we mean the net. A FAD can be seen as 'fishing gear', but it is not primary gear, only the net is. Any interactions of SSI with the FAD or other non-primary gear (skiff etc.) should be recorded on the GEN-2 (interactions) and the GEN-5 (FAD form). Do not record any landings of SSIs on the GEN-2 form anymore. However, it should also be noted that observers can record any lengths, and the sex of SSIs on the PS-4 form.

#### New data fields

If SSI OBSERVERD (Obs Time Sighted): This data field used to be on the GEN-2 form. Observers are asked to record the first time they saw any SSI that was with a school of tuna that the vessel set on. If when the vessel is watching a school of fish, deciding whether to set on it, and the observer sees an SSI (often a RHN, or other marine mammal), then the observer should record the first time they saw the SSI. It doesn't matter if the SSI is not captured or not, a time-stamp record should still be made.

<u>Comments / SSI Treatment</u>: Observers are encouraged to make a short note on how the SSI was treated by the vessel (dragged by its tail, released by lowering the net etc.) in the comments section. Other comments can be added to the journal/trip report.

Version 2 Workbook only: **SSI Condition Caught /Discard** If any SSIs are landed on deck record the condition of the SSI when first caught or landed on deck. Use the Condition codes (A1 to D) on the back of the form. Subsequently record the condition of the SSI when discarded. When there are multiple landings of an SSI (for instance a silky shark) give your best eye-estimate of the number of FAL with the same condition codes. You may need to use multiple lines. An example is below.

SPECIES CODE	FATE CODE	OBSEF (mT)	RVER No.	VESSE (mT)	L LOG No.	COND	SI DITION GHT / CARD
FAL	DPA	dash	5	dash	dash	A1	A1
FAL	DPA	dash	3	dash	dash	A1	A3
FAL	DPD	dash	1	dash	dash	A0	D
FAL	DPD	dash	8	dash	dash	D	D

#### New section

A new section has been added to allow observers to record any SSI that do not land on deck but are captured by the net and generally released (do not record any SSI landings in this section). Use some of the new Interaction with Primary Gear Codes at the bottom of the form to explain the interactions and fill in the condition of the SSI when it was captured and then released.

#### Version 2 Workbook only: New Gear Interaction Code:

IRN – Roped, pulled from net. See the Codes page.

### SPC/FFA REGIONAL PURSE SEINE OBSERVER LENGTH MEASUREMENT

#### Date of revision

The date of revision of the form was changed to Dec 2016.

#### **Modified data fields**

Which brail was sampled? Record the brail number for the brail that the observer is sampling from. Reminder - the brail number is recorded on the PS-1 form (along with its type, capacity, and whether it is for live fish brailing). Observers must follow this brail numbering through to the PS-4 form. If a second (or other) brail is used during the set then the observer must start a new PS-4 form and indicate the new brail number. An option to record a third brail has now been added. Normally vessels only have a maximum of two brails on board, so a third brail (Brail 3) usually indicates that a brail's capacity (the total amount it can hold when full) has been changed and this is recorded on the PS-1 form.

Pattern (24 brails) Previously, observers could record the fullness and the number of samples on one form for 30 brails. However, if observers correctly recorded five fish per brail there was no more space on the PS-4 form to record these fish lengths after 24 brails (although it was always okay to start a new page). In recognition of this the number of brails you can now record is 24. However, if observer sample more than 5 fish per brail – which may happen when they grab fish quickly they will still run out of space to record all the lengths and they are encouraged to record a new form.

#### New data fields

**Calibrated this set?** Observers are asked to state if they have calibrated their measuring instrument (calliper) before they started sampling. Circle 'Y' to say that the calliper has been calibrated.

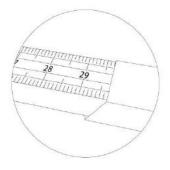
Callipers should be calibrated by 1) marking a known length on the deck and checking the calliper to see if it records the same length. 2) measuring a specific length of a deck tape (see the drawing below).



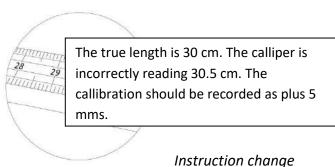
= /- mm: Record any calibration error for the calliper.

#### IF THE CORRECT CALLIPER READING IS 30 CM.

And then if the <u>calliper correctly shows 30 cm</u>, then the calibration should be recorded as zero millimetres.



The true length is 30 cm. The calliper is incorrectly reading 29.7 cm. The callibration should be recorded as minus 3 mms.



#### 'Other' Sampling Protocols

{Remember to start a new page, when you start a sampling protocol}

SS - This is a new sampling protocol that allows observers to record information on landed species of special interest. If landed SSIs are encountered on purse-seine vessels then observers can tick the 'other' sample type and record SS as the sampling protocol (SS - Species of Special Interest). This new sampling protocol allows observers to record both the length and sex on the PS-4 form, by marking the sex of the animal (when known) in the length measurement box. M- Male, F - Female, U- Unknown.

SPECIES	LENGTH
CODE	(cm)
FAL	M99 <sup>2</sup>
<sup>2</sup> FAL	M107
FAL	F97
* FAL	M121
ocs	F132
ं ०८ऽ	F149
OCS	M136
०८ऽ	F93
LTB	U 89
10	3

LB – This new sampling protocol is for Live-fish Brailing. Record LB into the "Other" Sample Type and then sampling as five live fish per brail, or as many as possible, and record the lengths on the main part of the PS-4 form.

#### SPC/FFA REGIONAL PURSE SEINE OBSERVER WELL TRANSFER RECONCILIATION FORM

FORM PS-5

#### Date of revision

The date of revision of the form was changed to Dec 2016.

#### **Modified Instructions**

The instructions were changed to remind observers that each transfer of fish (in or out of a well) requires at least one line of data. Additional lines of data may be required if additional well transfers occur (additional well loaded during the set for instance).

#### Date of revision

The date of revision of the form was changed to Dec 2016.

#### **Modified instructions**

18 – Drifting – No Fishing- This code can be used if the vessel is alongside another vessel transferring crew etc. There may be other ways to use this code during the trip.

### SPC/FFA REGIONAL OBSERVER FISH, BUNKERING and OTHER TRANSFERS LOGS (continued)

Supplementary FORM GEN -

#### Date of revision

The **date of revision** of the form was changed to Dec 2016.

The instructions on the back of the form for the Fish Transferred (circle units) empty data field was modified to remind observers that this data field can be useful to fill in 'mixed' tuna species for purse-seine vessel transfers.

# SPC / FFA REGIONAL OBSERVER SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS

FORM GEN - 2

#### **Modified form**

This form has been **completely re-designed.** The GEN-2 form is only to be used for species of species interest (SSI) that interact with the vessel and non-primary gear. Do not record any interactions with the vessels <u>primary gear</u> on the GEN-2 form. (The primary gear on a purse-seiner is the net. The primary gear on a longline vessel is the mainline and attached branch lines.)

Record all interactions with the vessel, FADs, tori pole, tender vessels, etc. on this form. An SSI interaction occurs when the presence of the vessel or some of its associated objects (but not gear) change the behaviour of the SSI (i.e. – they start swimming close to the boat).

Some data fields are listed here, to provide further explanation – even if they are not new.

Latitude and Longitude – Provide the position of the observer's vessel when the observer first notices the SSI.

#### New data fields

Most of the data fields are not new. They were already seen on earlier version of the GEN-2 form. A full explanation of each data field can be seen on the instruction page of the form.

Some data fields are listed here, only to provide further explanation.

**Latitude and Longitude** – Provide the position of the observer's vessel when the observer first notices the SSI.

Est Distance from V – **Estimated Distance from Vessel** – Record an eye-estimate of the <u>average</u> <u>distance</u> the SSI was from the vessel during the interaction. Record the distance in (m) meters or (NM) nautical miles.

**Estimate of SSI Length** – Record an eye-estimate of the SSI's length for both adults and juveniles (if present). Record the length in m – meters or cm – centimetres – more appropriate for turtles for instance.

**Total Number** – Record an eye-estimate of the total number of adults and juveniles (if present). If there are a lot of species (large pod of marine mammals) moving quickly, just do your best to provide a good estimate.

#### New codes

VESSEL INTERACTION CODES: Use these codes to describe how the SSI interacted with the vessel or non-primary gear.

IBV - Interaction, beside vessel

ICV - Collision with vessel

ICP - Collision with propeller

ICF - Interaction, crew feeding

ICT = Collision with Tori line

IWF - Interaction - with FADs, but not set on

IDW - Interaction - dead in water

IFO - Feeding on discarded offal

OTH - Interactions - other, please specify

IRE - Resting on vessel or floats (birds)

#### Deleted data fields

Most of the data fields relating to any landings of SSI have been removed from the GEN-3 form.

SPC / FFA REGIONAL OBSERVER	Supplement to
SPECIES OF SPECIAL INTEREST - SIGHTINGS	FORM GEN - 2

#### **Modified form**

This form has been **completely re-designed**. Record any <u>sightings</u> of species of special interest on this form. Normally sighted SSI will be far from the vessel. **CAUTION** Observers are advised to use common sense when recording sightings of birds. We are not asking for observers to sit on deck and record bird sightings all day. Further training and ID guides for bird identification will come through in 2017. When filling in any bird sightings observers are advised to try to give a general indication of the type and amount of birds that are in the area.

#### New data fields

Most of the data fields are not new. They were already seen on earlier versions of the GEN-2 form. A full explanation of each data field can be seen on the instruction page of the form.

Some data fields are listed here, only to provide further explanation.

**Latitude and Longitude** – Provide the position of the observer's vessel when the observer first notices the SSI.

#### New Codes

#### **Sighting Codes**

Record a sighting code to explain the behaviour of the SSI when sighted.

#### New data fields contd

#### SIGHTINGS CODES

SDS - Sighting - Distance Swimming

SBR - Sighting - Breaching

STP - Sighting - Tail slapping or playing

SMG - Sighting - Motionless in group

SDW - Sighting - Dead in Water

SBO - Sighting - Bird overhead

OTH - Sighting - Other, please specify

**TALLY** – Use this area to tally up any SSI sighted from the vessel. This will mostly relate to marine mammal with a large number of individuals. Record this tally by incident/event normally, or record a tally for a full day if appropriate. Tally should also be separated by sighting codes. For instance you may have a tally of 5 for MYS - (Baleen Whales) sighted as breaching and 3 SIW - (Sei Whales) sighted as distance swimming. Note you are not being asked to fill a tally of birds sighted on a daily basis. Use some common sense when recording bird sightings until further training is provided.

**Total number** – Record the total number of SSI sighted mostly by incident/event, but by day if appropriate.

OBSERVER	SPC/FFA REGIONAL OBSERVER	FORM GEN-3
PROGRAMME:	VESSEL TRIP MONITORING SUMMARY	(pg 1)

#### Date of revision

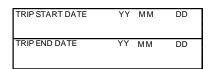
The date of revision of the form was changed to Dec 2016.

#### **Modified form**

The name of the form was modified to **vessel trip monitoring summary** so it was in alignment with the wording on the WCPFC minimum data standards.

#### New data fields

The **start of trip** and **end of trip** data fields were added so the trip can be more easily identified if the GEN-3 form is separated from the rest of the observer data for compliance reasons.



SPC/FFA REGIONAL OBSERVER	FORM GEN-3
VESSEL TRIP MONITORING SUMMARY	(pg 2)

#### Date of revision

The date of revision of the form was changed to Dec 2016.

#### Modified form

The name of the form was modified to **vessel trip monitoring summary** so it was in alignment with the wording on the WCPFC minimum data standards.

#### New data fields

**Debriefing Status**: New data fields were added to show whether the GEN-3 form has been debriefed or not. Please note observers should not fill in these data fields. If under the data sharing rules the GEN-3 form is transferred to another party the observer coordinator must circle 'not debriefed' if that is the case. If a debriefer does check the GEN-3 form at any stage, they must circle whether it has been predebriefed or debriefed.

#### **Modified** instructions

**Debriefing Status:** The instructions were modified to inform debriefers to circle the most appropriate status of debriefing (see above).

#### Date of revision

The date of revision of the form was changed to Dec 2016.

#### Modified instructions

A new weight code 'NM' – not measured was added for consistency with the LL-4 (longline) form.

### FAD/PAYAO and FLOATING OBJECTS INFORMATION RECORD

Form GEN-5

#### Date of revision

The date of revision of the form was changed to Dec 2016.

Modified form / instructions

"THE WCPFC recognises live whale sharks, marine mammals etc. as FADs. Just dash through any data fields on the GEN-5 form that are not relevant if the FAD is a live animal."

The new instructions on the back of the GEN-5 form should be self-explanatory. Some observers have been wondering if the GEN-5 is relevant when the FAD is a <a href="white=wh

{The definition of a FAD in footnote 1 to CMM 2008-01 shall be interpreted as including: "any object or group of objects, of any size, that has or has not been deployed, that is living or non-living, including but not limited to buoys, floats, netting, webbing, plastics, bamboo, logs and whale sharks floating on or near the surface of the water that fish may associate with"}

# SPC/FFA REGIONAL OBSERVER POLLUTION REPORT

FORM GEN-6

#### Date of revision

The date of revision of the form was changed to Dec 2016.

There were no other changes made to this form.

### SPC/FFA REGIONAL OBSERVER OBSERVER PLACEMENT MEETING RECORD

FORM SUP-1 (pg1)

The placement form is filled in by the Placement Officer. The Observer and the Captain will be asked to sign the form.

#### Date of revision

The date of revision of the form was changed to Dec 2016.

#### New data fields

**Calliper Serial Number** The placement form will now trap the serial number of the calliper the observer boarded with, or was available on the vessel for the observer's use.

Personal Lifesaving Beacon (PLB): Circle Y to indicate that the observer has a PLB.

**PLB Make:** The placement officer should record the make, or the name of the manufacturer who made the PLB.

**PLB Model:** The placement officer should record the model (or specific type) of PLB unit that was made by the manufacturer.

Ensured that the Observer's compulsory 2-way communication device tested and checked is working.

The placement officer, observer and captain should sign when they agree that the observer has a functioning PLB.

Observer must sign for and report any gifts they have received from the vessel during the trip.

The Captain and Observer must initial when they understand that observer must report any received gifts. The observer should mention any received gifts in their trip report.

**Interpreter signature** – If present, the interpreter should sign and acknowledge that they have read the Placement form.

#### Modified data fields

In line with the Observer code of Conduct ensure that the observer should not drink alcohol at any point during the trip. Observers are to sign to understand that they cannot drink alcohol from the trip start to the trip end. This includes drinking alcohol on-board other vessels encountered during the trip (carrier vessels, bunkering etc.).

**Vessel Safety Check** – The acronym for WCPFC was removed from the title to reflect that the check list is amended from the original WCPFC Vessel Check List guideline.

The wording was modified in the following lines

Page 1

Provide Allow access to the bridge, communications and navigation equipment

Provide Instruct observer on use of vessel communications equipment to receive and transmit message with the shore, Fishery Authority and other vessels.

Provide "appropriate" (added) space for the storage of observer equipment, supplies and samples.

#### <u>Deleted data fields</u>

• *Page 1* 

Line 4 was repeated under line 7 in the 2014 edition. The line was removed and the numbering below edited. "Carried out a vessel safety check in the presence of the observer and Captain."

• Back of page 1

Line 9 on the 2014 edition under "Obligations of the vessel operator to the Observer" was repeated as line 16. **Line 16 was removed** and the lines below re-numbered.

 $\underline{N/A}$  – The option to record N/A – not available from the vessel safety check list was removed. The placement officer must indicate if the item exists or not.

SPC/FFA REGIONAL OBSERVER	FORM SUP-2
WORKBOOK REFERENCE FORM	for Purse Seine

#### Date of revision

The date of revision of the form was changed to Dec 2016.

There were no other changes made to this form.

SPC/FFA REGIONAL OBSERVER	FORM
TRIP RECONCILIATION	SUP-3

#### Date of revision

The date of revision of the form was changed to Dec 2016.

There were no other changes made to this form.

SPC/FFA REGIONAL OBSERVER	FORM
ADVANCES and CLAIMS FORM	SUP-4

#### Date of revision

The date of revision of the form was changed to Dec 2016.

There were no other changes made to this form.

	SINGLE	TAG RECOVERY FORM	PAGE OF		
REVISED SPC - Feb. 2017: CRITICAL TAG INFORMATION					
	TAG NUMBER:	DATE WHEN TAG FOUND:			

#### Date of revision

The date of revision of the form was changed to Feb 2017.

Some changes have been made to the tagging form to allow information on tags recovered from species of special interest to be recorded. For this reason **all reference to 'fish' have been removed** from the tagging form.

**Length code** – observers are no longer restricted to recording an UF – upper jaw to fork in tail on the tagging form. Other type of measurement can be done for turtles, birds etc. Please see the length measurement page in the PS Workbook. Record the code for the length measurement done on the tagging form.

#### **NEW BLANK PAGES**

Attach any loose pages here (Crew list, Well Layout, Net Plans etc)

New Blank pages have been attached to the workbook to improve the paper filing of observer forms. Attach any loose pages (like the crew list etc) to this area of the workbook.

#### SPC/FFA REGIONAL OBSERVER **FORM SUP-2 WORKBOOK REFERENCE FORM** for Purse Seine REV MAR. 2014 TRIP DETAILS OBSERVER NAME TRIP START LOCATION TRIP START DATE (YY/ MM/DD) VESSEL NAME TRIP END LOCATION TRIP END DATE (YY/MM/DD) OBSERVER TRIP ID NUMBER **OBSERVER PROGRAMME DETAILS** Name of placement observer programme Name of observer's national programme Cross-endorsed trips: Programme Name and Trip Id Number SPECIAL PROJECTS Special Projects: Name and Reference Number Special Projects: Name and Reference Number FORMS MANAGEMENT FORMS TYPE NAME OF FORM How Many? SUP-1 (page1) Observer Placement Meeting Record Form (pq1) SUP-1 (page 2) Observer Placement Meeting Record Form (pg2) SUP-2 Workbook Reference Form Purse-Seine General Information (pg1) PS-1 (page 1) PS-1 (page2) Purse-Seine General Information (pg2) PS-2 Purse-Seine Daily Information PS-3 Purse-Seine Set Details PS-4 Purse-Seine Length Measurement PS-5 Well Transfer Reconciliation Form GEN-1 Vessel and Aircraft Sightings/ Fish Bunkering & Other Transfers GEN-1 supp Vessel and Aircraft Sightings/ Fish Bunkering & Other Transfers GEN-2 Species of Special Interest - vessel interactions GEN-2 supp Species of Special Interest - sightings GEN-3 (page 1 + page 2) Vessel Trip Report (pg1+pg2) - you must fill in this form! GEN-4 **Conversion Factors** GEN-5 FAD/PAYAO and Floating Object Information Record GEN-6 Pollution Report SUP-3 Trip Reconciliation Form SUP-4 Advances and Claims Forms TAG Tag Recovery Forms (single and mutliple tags) JOU Journal (RECORD TOTAL NUMBER OF PAGES) RPT Trip Report Submitted Yes or No \*\*\* Observers are not required to fill in the shaded areas below\*\*\*

DEBRIEFING DETAILS							
NAME of PRE-DEBRIEFER		NAME OF DEBRIEFER					
DATE of PRE-DEBRIEFING		DATE OF DEBRIEFING					
PLACE of PRE-DEBRIEFING		PLACE OF DEBRIEFING					

WORKB	WORKBOOK TRANSFER							
WAS THIS COPY DEBRIEFED BEFORE TRANSFER?	YES or NO							
DATE TRANSFERRED		PRINT VERSION 2						

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				GPS	Y/N					D	EPTH SOUNDER	Y /	N				
			TRACKPL	OTTER	Y / N						SST GAUGE	Y /	N				
						USAGE		MA	KE		MODEL		(	COMME	NTS		
ADV in		ENT TYPE			Y / N												
TEC.	EQUIPM	ENT TYPE			Y / N												
			BIRD	RADAR	Y / N												
				SONAR	Y / N												
			GPS	BUOYS	Y / N												
		ı	ECHO SOUNDIN	GBUOY	Y / N												
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		DOPF	LER CURRENT	METER	Y / N												
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WEDSITES	www.	www.	www.
OBSERVATIONS / CO	OMM ENTS / OTHER GEAR / UNUSUAL USInotes here and a full description in trip repo	E OF GEAR	USAGE CODES  L - used all the time in fishing A - used only in transit F - used often in fishing - used sometimes in fishing R - rarely used - broken now but used normally L - no longer ever used
		1	I.B fishing can be searching, setting, etrieving, deploying, investigating, etc.

Notes on FORM PS-1 (pg 1) N.B.: Wherever there is a Y / N (yes or no) option for an item, either the "Y" or the "N" must be circled REV. DEC. 2016 A complete fishing trip is defined as 'from one full or partial unloading to the next full or partial unloading'. If observer trip does not cover a normal complete fishing trip explain reasons why in trip report - also see "Partial trips" notes, below. TRIP DETAILS NAME and NATIONALIT! First and family names must be in full and in correct order (e.g., "John Masa" not "Masa, John"). Nationality as passport. Print number issued by the authority sending you on this trip. TRIP ID No. (E.g.: John H. Masa, on his third trip in 1996 might be issued Trip ID Number: "JHM 96-03"). Print date using "year year/ month month / day day" format. TRIP START (SHIP'S DATE USE SHIP'S TIME (and DATE) } Print time using 24 hour "hour hour : minute minute" format. and TIME) TRIP END (e.g. Print five past one on the afternoon on 3rd of January, 1996 as "96/01/03 - 13:05"). TRIP START LOCATION / TRIP END LOCATION / VESSEL DEPARTURE PORT: Record in all three boxes even if the same port. N.B.:Observer trip officially starts and ends only when the vessel on which the catch is actually observed is boarded and disembarked. If Partial trips boat met at sea "Trip Start Date and Time" is day of transfer from transit vessel to observed boat. "Trip Start Location" is "At sea". If transferred off host vessel to another to return to port "Trip End Date and Time" is day of transfer. Trip End Location is "At sea". In each case 'at sea' should be followed by a position in degrees and minutes (dd<sup>0</sup>mm') only. Multiple trips - If observing catch on 2 (or more) boats, each new observed boat must be a new trip with separate observer trip ID No. and new forms. VESSEL NAME Full name with no abbreviations. E.g.: a vessel with the name "Captain Paul John Smith" should not be abbreviated to Capt. P.J. Smith. FISHING PERMIT Record all numbers of current fishing licenses on board. This may include more than one license. There should be at least one on board if / LICENSE NUMBERS the vessel fishes in any EEZ waters. Note country the license comes from in brackets alongside number. E.g.: K3453789H (Kiribati). VESSEL CHARACTERISTICS VESSEL OWNER Name of Company or Person who owns the vessel. This should be in the Registration Papers. COUNTRY Number given by the Country (Flag State) to where the vessel is registered. REGISTRATION NUMBER This can be found in the registration papers of the vessel. Do not confuse this with FFA Regional Registration Number. Country where vessel is registered. E.g.: Japanese purse seiners are usually registered in Japan so their Flag State is Japan. VESSEL FLAG TRCS Series of numbers and letters painted on the side of the boat, must be either in black lettering on a white background or white on black. (international radio call sign) WCPFC requires all vessels over 100 Gross Tonnage to have a UVI after 1st Jan 2016. The number may appear on certificates before UVI - Unique Vessel Identifier 2016. Generally the UVI is the International Marine Organistion number or may be the Lloyd's Register (LR) no. NO OF SPEED BOATS Number of speed boats. Don't count tow boats, or a boat that looks like a speed boat but is only used as a tow boat. NO OF AUXILIARY BOATS Count only the tow boats and light boats that the vessel keeps **onboard**. Don't count a speed boat if it is already counted. Do OTHER TENDER BOATS Boats (ranger boats, light boats, reefers, etc.) not carried on board but work with the catcher boat as a regular part of the fishing strategy. **WORK with CATCHER?** N.B.: do not include such boats, operating as light boats, in the count of "Auxiliary boats onboard". Describe operations in trip report. NET SKIFF ENGINE Brand of engine used in net skiff and the power (horsepower - hp) of the engine. LENGTH GROSS TONNAGE MAKE / POWER Get this from the skiff driver. E.g.: Caterpillar 3408 (400hp) VESSEL CRUISING SPEED Ask the captain for the cruising speed of the vessel (not top speed). The place to find vessel's length overall (LOA) and HELICOPTER MAKE/MODEL Brand name and model of the helicopter. Ask the pilot if you need to. gross tonnage is on registration papers. Be alert for REGISTRATION NO. Registration No. of helicopter. Written on side or pontoons or ask pilot. any signs that suggest there has been a change to Distance helicopter can go and return safely, without running out of fuel. EFFECTIVE RANGE length and/or gross tonnage. Note in report. COLOUR of HELIC Main colour or colours of the helicopter FISHING GEAR POWER BLOCK - Make Brand of main power block on the vessel. If these cannot be seen, ask the captain, engineer or winch driver. - Model The model of the block. Only fill in this information if sure it is correct. PURSE WINCH Brand of main purse winch on the vessel. If unsure, record the information in your written report only, with a note. (Make, Model) The model of the winch. M = Metres: Y = Yards: F = FathomsMAX. NET DEPTH Deepest depth of the net wall when it has been set. Make sure you circle the correct unit used on the vessel for net The length of the net when it has been set. MAX. NET LENGTH Each net is made up of strips of netting sewn together to create the depth of the net (e.g.: if the depth of net is to be 300 metres then 30 **NET - No OF STRIPS** strips of 10 metre wide net are required to make the net depth (adding strips deepens the net, removing strips makes it shallower). How many of these strips make up the net? Ask the deck boss or engineer for this information. The mesh is a different size in different parts of the net. Record the mesh size of the main body of the net. NET MESH SIZE OF MAIN SECTION Make sure the units are recorded in "CM" (centimetres) or "IN" (inches). Ask the Deck Boss. Starting with Brail 1 (the brail with the largest capacity), use the new brail type codes to indicate what type of brail it was (see notes and drawing at the start of the workbook - 'Changes to PS workbook'). Then record the capacity of the brail in metric tonnes. This will help BRAIL: TYPE, CAPACITY. estimate the total catch. Remember to identiy the same brail (brail 1) in the same way (brail 1) on the PS-4 form. If there is a second type of LIVE FISH BRAIL brail record the information for Brail 2. If the vessel intentionally brails live fish onboard with any of the brails and processes these tuna differently mark Yes. Record any changes to brail capacity (new panel inserted etc) by recording a new brail number (i.e. Brail 2 or Brail 3) and then recording **Brail change comments** all the brail details and specifiying the type, new capacity and whether the brail is used for live fish brailing. Provide brief comments on the brail change (like date, reason etc) in this data field.  $\textbf{ELECTRONICS-YES} \ / \ \textbf{NO} - \textbf{If vessel has a device, circle "Y" (yes); if it does not have the device circle "N" (no). You must circle "Y" or "N" for every device listed.}$ use codes (bottom front of form) to show how much each piece of equipment, for which "Y" is circled, is used. **USAGE** Only record new types of equip. or major upgrades to technology here. Not to be used to record old or unlisted equip. i.e. radio. Give a full description of any new equipment or new capability (through upgrades technology) in the journal etc. ALS Automatic Identification System: Transponding unit that will be attached to VHF Antenna, but maybe located inside. Name of company and model (name or number) of each device listed. MAKE AND MODEL Don't mix up make and model. E.g.: for a "JRC, JMA - 7790": "JRC" is the brand (make); "JMA - 7790" is the model. Record the manufacturer's name (e.g.: Trimble, Thrane and Thrane, Furuno, etc.) and the model of the MTU unit. VMS System: INFORMATION Vessels may access "Fishery information services" to get instant information on oceanographic features. SERVICE

#### OBSERVATIONS / COMMENTS, OTHER GEAR, UNUSUAL USE of GEAR

Make notes if there is anything special about this boat compared to others. Comment if equipment is not working, not used or used in unusual way. Describe fishing gear if different to equipment you see on other purse seiners and record make, model, special characteristics and usage of new gear.

### SPC/FFA REGIONAL PURSE SEINE OBSERVER

**FORM PS - 1** (pg 2)

DEV DE0 40	Gl	ENERAL	INFO	RMATI	ON				(1 0 )
REV. DEC 16 OBSERVER NAME		VESSELNAME					OBSERVE	R TRIP ID	NUMBER
TOTAL POSSIB	LE FISH STORAGE	CAPACITY	(in me	tric tonr	nes):	<b>→</b>			mT
CREW	NAME	Υ	RS.EXP	NA1	ΠΟΝΑLITY		COM	MENTS	
CAPTAIN						License No.			
MASTER						License No.			
NAVIGATOR									
MATE									
CHIEF ENGINEER									
ASSISTANT ENGINEER									
DECKBOSS									
COOK									
HELICOPTER PILOT									
HELICOPTER MECHANIC									
RADIO OPERATOR						<u> </u>			
SKIFFMAN									
WINCHMAN									
TRANSLATOR									
CREW NAME	YRS.EXI	P NATIONA	LITY	CREW	NAME		YRS.EXP	NA	TIONALITY
TOTAL N	UMBER OF CREW (i	nclude Ca	ptain a	nd offic	ers):	$\longrightarrow$			
WASTE DISPOSAL SY	STEM ?	Y / N	SAF	ETY E	QUIPMENT				
DESCRIBE waste disposal	system especially for fish offal			ACKET		FOR OBSER	VER: Y /	N/O	Number of
	waste.					SUITABLE		/ N	LIFE BUOYS / LIFE RINGS
				LABILITY cle one)	Easy	Moderate	Har		Ell E KINGO
			LIFE	RAFTS				l	4
				nber of ole and	1 Number	2 Number	Number	3	4 Number
				tion due (D) or					
			last	date of ction (L)	YY / MM (Lor D)	YY/MM (L	or D) YY / MM	И (Lor D)	YY / MM (Lor D)
					Tot al No. Wi	th Exp. Batteries	EPIRB	Total No.	No. with Exp. Batteries
			EPIK	B (406)			(other)		
COMMENTS or DRAW	INGS of WELL PATTER	N							

#### **REV. DEC 2016**

BSERVER NAME	Print your name in full. Put your first name, or Christian name, first and lyour last name, or surname, last.
ESSEL NAME	Print the vessel's name in full as stated on its fishing licence. Don't use any abbreviations.
OBSERVER TRIP ID NO.	Fill in your trip identification number as supplied by your programme before departure - exactly as on PS-1 (pg.1)
	and elsewhere.

&		
CREW		
NAME	(for listed specialist positions)	For each of the listed positions enter the name of the crew person who works in this position.  This information should be available on the crew list that must be given to immigration when a vessel visits port.  Record first name first and last name last. Be certain of the spelling.  If a person holds more than one position write "same as (the other position they hold)". E.g.: if Joe Flyer is both helicopter pilot and helicopter mechanic, write "Joe Flyer" next to "Helicopter Pilot" and write "same as helicopter pilot" next to "helicopter mechanic".  Another common double position is the Captain and Navigator/Master. If the vessel does not have anyone in the position indicated write "Vacant" in the "Name" column.  If the vessel has a specialist position that is not listed here try to squeeze the name of that position followed by a dash (-) and the name of the person holding the position in one of the "Crew" rows below. Be sure to describe this position in the written trip report.
(fo	positions)	For each crew mewmber not working in a specialist position correctly record the name, number of years of experience and the nationality in the lower crew sections.
YEARS EX (YRS.	PERIENCE .EXP)	Record the number of years experience the crew member or officer has <b>in this position</b> . E.g.: if the Captain has been fishing on purse seine vessels for 20 years but has only been a Fishing Captain on purse seine vessels for five years write in "5".
NATIONALITY		Nationality should be available on the crew list. Pay special attention to the nationality of any Pacific Islanders amongst the crew.  Record any information about the crew in this column. Any relevant information may be useful.
COMMEN		Examples could include: name of boat previously worked; name of Fishery College attended; famous fishing
(Capta Na	ense No.s in / Master / vigator)	family connection; etc.  To be recorded if readily available but not necessary if obtaining it will in any way hinder other observer activities on board. If licence is not available then try to obtain other identification document types (e.g. passport) and their document numbers.  Add up all the crew. Include the Captain, listed positions and other crew. But be very careful not to count any of
CREW (in	NUMBER OF actude Captain officers)	the crew twice.  This is an easy mistake to make in situations where one crew person has two different positions. Be Careful!
	E DISPOSAL	Circle "Y" or "N" (yes or no) to show if the vessel has equipment and / or follows standard procedures to manage fish offal or other waste.  Examples of equipment of equipment include incinerators, crushers, shredders, compacters, balers, meal plants, etc.  Example of procedures might be keeping all plastic waste until the end of the trip. If present describe how these are used and how effectively they are used in your trip report. (i.e., what pollution control processes does the vessel have?)

#### SAFETY EQUIPMENT (obtain as much information as possible

DATELL EQUILINI	21 <b>V1</b> (Obtain as much information as possible
	If observer has their own (or a fisheries) life jacket (LJ), the "O" must be circled.
LIFE JACKET	Otherwise circle the "Y" or "N" to show if the vessel showed the observer a L J that they could use in an
	emergency. Also circle the "Y" or "N" to show if the LJ the vessel offered was a suitable size. Circle "easy" if the
	allocated L.J was easily available, "moderate" ift not so easy to get to, or "hard" if it would be very hard to find in
	an emergency.
EPIRBS LIFEBUOYS / LIFE RINGS	Count all EPIRBs together (with or without expired batteries). Then count only those with expired batteries.  Only record information for EPIRBs that are easily accessible (not found in liferaft etc).  Count all lifebuoys and life rings that can be found
LIFE RAFIS	Find info on labels on life-rafts. If, <b>after a careful check</b> , dates are not found, record "ND" for 'dates not
	displayed'.

OBSERVER PROGRAMME:					C/FFA REGIONAL PURSE SEINE GENERAL INFORMATION								F	ORM	PS-	<b>1</b> (p	g 1)			
REV. DEC 2016					GEN	ER <i>P</i>	<u> LIN</u>	FO	RMA	HON							,			
	DETA	AILS																		
NAME					TRIP START LOCATION TRIF									T (SHIP'S E	ATE ANI	TIM E)	)			
ű l	NATIONALITY TRIPID NUMBER											YY	ММ	DD	h	h	m m			
OBSERVER						TRIP END I	OCATIO	NC						TRIP END (SHIP'S DATE AND TIME)						
380 1	OI ( I I I	111111111111111111111111111111111111111	m b Lit			1101	2007111	511					YY					m m		
																ļ				
VESSEL NAME FISHING PER					RMIT / UCENSE No.s VESSEL DEPA							ARTURE	RTURE PORT VESSEL DEPARTURE DA YY M M DI							
VES	SEL C	HARACT	ERISTICS																	
VESSEL O	WNER				COUNTRY	REG. No. IRCS UVI						FL	FLAG LENGTH M GT (circle one)							
										<u></u>	OWED		F GR	Т		mT				
			Do OTHER TENDER	BOATS	Υ	/ N	NET	SKIFF	MAŁ		POWER	Ċ	ESSEL CRUISING							
BOATS		_	MAKE MAKE	TS MOD		CATCHER ENGINE; /  REGISTRATION NUMBER EFFECTIVE RANGE COLOUR								hp SPEED: kts  No. of VESSELS that the						
HELICOPTER			ETT ZONT ZONT ETM							HELICOPTER SERVICES: (including this vessel)										
												NM		(Including	y IIII's vesse	')				
FISE	IING G	MAKE		M ODEL		I		MAI	KF			M ODEL	Τ.	TYPE	T		111/15			
POWER		With		WODEL		PURSE		Wirki				WODEL	BRAIL				LIVE FISH	ا ن ا		
BLOCK:						WINCH:								TYPE		mT	BRAII			
NET - MAX.		M Y	NET - MAX.		Metres Yards	NET - No. of			NET M	ESH SIZE		CM IN	BRAIL	ITPE			LIVE FISH	1 .		
DEPTH: BRAIL	1	F	LENGTH:		Fathoms	STRIPS	IANGE	COMM		f main body	/)	CIVI IIN		TYPE		mT	BRAII UVE			
TYPE				BRAIL CHANGE COMMENTS							BRAIL 3			mT	FISH	ا ن ا				
CODES	CTRO		1L 01-0A	IANLOL		USAGE							јш	USA	AGE		BRAIL			
				GPS	Y/N						DF	PTH SOUNDER	Υ/							
		_																		
	TRACKPLOTTER Y/N					SST GAUGE Y						Y /	′/N							
					USAGE	SAGE MAKE MODEL							COMMENTS							
A DV in	EQUIPM ENT TY PE			Y / N																
TEC.	EQUIPM ENT TYPE			Y/N																
	BIRD RADAR Y				Y/N															
	SONAR			Y/N																
			GPS	BUOYS	Y / N															
		E	ECHO SOUNDIN	G BUOY	Y / N															
		NET DEPT	H INSTRUMEN	TATION	Y / N															
DOPPLER CURRENT METER Y / N																				
	AIS Y				Y / N															
	VMC	1			Y / N															
	VMS YSTEMS  2  Y /			Y / N						+										
	COM M UNICATION SERVICES			LLITE:	Y / N	Phone#	#			1	M OBILE/	I	Phone#							
					Y/N					CELL Y					ļ					
			OTHER FAC		SIM ILE:	Y / N						PHONE:								
	INFORMATION WEATHER WEATHER SERVICES PHYTOPLA					Y / N	WEA	THER S			Y/N	EM AIL: Y	′ / N	Email address:						
												/ N	SEA HEIGH	П		Y	/ / N			

OBSERVATIONS / COMMENTS / OTHER GEAR / UNUSUAL USE OF GEAR	USA GE CODES
(w rite brief notes here and a full description in trip report)	ALL - used all the time in fishing
	TRA - used only in transit OIF - used often in fishing
	SIF - used sometimes in fishing RAR - rarely used
	BRO - broken now but used normally
	NOL - no longer ever used

OTH - other please specify

N.B. - fishing can be searching, setting, retrieving, deploying, investigating, etc.

Notes on FORM PS-1 (pg 1) N.B.: Wherever there is a Y / N (yes or no) option for an item, either the "Y" or the "N" must be circled REV. DEC. 2016 A complete fishing trip is defined as 'from one full or partial unloading to the next full or partial unloading'. If observer trip does not cover a normal complete fishing trip explain reasons why in trip report - also see "Partial trips" notes, below. TRIP DETAILS NAME and NATIONALIT! First and family names must be in full and in correct order (e.g., "John Masa" not "Masa, John"). Nationality as passport. Print number issued by the authority sending you on this trip. TRIP ID No. (E.g.: John H. Masa, on his third trip in 1996 might be issued Trip ID Number: "JHM 96-03"). Print date using "year year/ month month / day day" format. TRIP START (SHIP'S DATE USE SHIP'S TIME (and DATE) } Print time using 24 hour "hour hour : minute minute" format. and TIME) TRIP END (e.g. Print five past one on the afternoon on 3rd of January, 1996 as "96/01/03 - 13:05"). TRIP START LOCATION / TRIP END LOCATION / VESSEL DEPARTURE PORT: Record in all three boxes even if the same port. N.B.:Observer trip officially starts and ends only when the vessel on which the catch is actually observed is boarded and disembarked. If Partial trips boat met at sea "Trip Start Date and Time" is day of transfer from transit vessel to observed boat. "Trip Start Location" is "At sea". If transferred off host vessel to another to return to port "Trip End Date and Time" is day of transfer. Trip End Location is "At sea". In each case 'at sea' should be followed by a position in degrees and minutes (dd<sup>0</sup>mm') only. Multiple trips - If observing catch on 2 (or more) boats, each new observed boat must be a new trip with separate observer trip ID No. and new forms. VESSEL NAME Full name with no abbreviations. E.g.: a vessel with the name "Captain Paul John Smith" should not be abbreviated to Capt. P.J. Smith. FISHING PERMIT Record all numbers of current fishing licenses on board. This may include more than one license. There should be at least one on board if / LICENSE NUMBERS the vessel fishes in any EEZ waters. Note country the license comes from in brackets alongside number. E.g.: K3453789H (Kiribati). VESSEL CHARACTERISTICS VESSEL OWNER Name of Company or Person who owns the vessel. This should be in the Registration Papers. COUNTRY Number given by the Country (Flag State) to where the vessel is registered. REGISTRATION NUMBER This can be found in the registration papers of the vessel. Do not confuse this with FFA Regional Registration Number. Country where vessel is registered. E.g.: Japanese purse seiners are usually registered in Japan so their Flag State is Japan. VESSEL FLAG TRCS Series of numbers and letters painted on the side of the boat, must be either in black lettering on a white background or white on black. (international radio call sign) WCPFC requires all vessels over 100 Gross Tonnage to have a UVI after 1st Jan 2016. The number may appear on certificates before UVI - Unique Vessel Identifier 2016. Generally the UVI is the International Marine Organistion number or may be the Lloyd's Register (LR) no. NO OF SPEED BOATS Number of speed boats. Don't count tow boats, or a boat that looks like a speed boat but is only used as a tow boat. NO OF AUXILIARY BOATS Count only the tow boats and light boats that the vessel keeps **onboard**. Don't count a speed boat if it is already counted. Do OTHER TENDER BOATS Boats (ranger boats, light boats, reefers, etc.) not carried on board but work with the catcher boat as a regular part of the fishing strategy. **WORK with CATCHER?** N.B.: do not include such boats, operating as light boats, in the count of "Auxiliary boats onboard". Describe operations in trip report. NET SKIFF ENGINE Brand of engine used in net skiff and the power (horsepower - hp) of the engine. LENGTH GROSS TONNAGE MAKE / POWER Get this from the skiff driver. E.g.: Caterpillar 3408 (400hp) VESSEL CRUISING SPEED Ask the captain for the cruising speed of the vessel (not top speed). The place to find vessel's length overall (LOA) and HELICOPTER MAKE/MODEL Brand name and model of the helicopter. Ask the pilot if you need to. gross tonnage is on registration papers. Be alert for REGISTRATION NO. Registration No. of helicopter. Written on side or pontoons or ask pilot. any signs that suggest there has been a change to Distance helicopter can go and return safely, without running out of fuel. EFFECTIVE RANGE length and/or gross tonnage. Note in report. COLOUR of HELIC Main colour or colours of the helicopter FISHING GEAR POWER BLOCK - Make Brand of main power block on the vessel. If these cannot be seen, ask the captain, engineer or winch driver. - Model The model of the block. Only fill in this information if sure it is correct. PURSE WINCH Brand of main purse winch on the vessel. If unsure, record the information in your written report only, with a note. (Make, Model) The model of the winch. M = Metres: Y = Yards: F = FathomsMAX. NET DEPTH Deepest depth of the net wall when it has been set. Make sure you circle the correct unit used on the vessel for net The length of the net when it has been set. MAX. NET LENGTH Each net is made up of strips of netting sewn together to create the depth of the net (e.g.: if the depth of net is to be 300 metres then 30 **NET - No OF STRIPS** strips of 10 metre wide net are required to make the net depth (adding strips deepens the net, removing strips makes it shallower). How many of these strips make up the net? Ask the deck boss or engineer for this information. The mesh is a different size in different parts of the net. Record the mesh size of the main body of the net. NET MESH SIZE OF MAIN SECTION Make sure the units are recorded in "CM" (centimetres) or "IN" (inches). Ask the Deck Boss. Starting with Brail 1 (the brail with the largest capacity), use the new brail type codes to indicate what type of brail it was (see notes and drawing at the start of the workbook - 'Changes to PS workbook'). Then record the capacity of the brail in metric tonnes. This will help BRAIL: TYPE, CAPACITY. estimate the total catch. Remember to identiy the same brail (brail 1) in the same way (brail 1) on the PS-4 form. If there is a second type of LIVE FISH BRAIL brail record the information for Brail 2. If the vessel intentionally brails live fish onboard with any of the brails and processes these tuna differently mark Yes. Record any changes to brail capacity (new panel inserted etc) by recording a new brail number (i.e. Brail 2 or Brail 3) and then recording **Brail change comments** all the brail details and specifiying the type, new capacity and whether the brail is used for live fish brailing. Provide brief comments on the brail change (like date, reason etc) in this data field.  $\textbf{ELECTRONICS-YES} \ / \ \textbf{NO} - \textbf{If vessel has a device, circle "Y" (yes); if it does not have the device circle "N" (no). You must circle "Y" or "N" for every device listed.}$ use codes (bottom front of form) to show how much each piece of equipment, for which "Y" is circled, is used. **USAGE** Only record new types of equip. or major upgrades to technology here. Not to be used to record old or unlisted equip. i.e. radio. Give a full description of any new equipment or new capability (through upgrades technology) in the journal etc. ALS Automatic Identification System: Transponding unit that will be attached to VHF Antenna, but maybe located inside. Name of company and model (name or number) of each device listed. MAKE AND MODEL Don't mix up make and model. E.g.: for a "JRC, JMA - 7790": "JRC" is the brand (make); "JMA - 7790" is the model. Record the manufacturer's name (e.g.: Trimble, Thrane and Thrane, Furuno, etc.) and the model of the MTU unit. VMS System: INFORMATION Vessels may access "Fishery information services" to get instant information on oceanographic features. SERVICE

#### OBSERVATIONS / COMMENTS, OTHER GEAR, UNUSUAL USE of GEAR

Make notes if there is anything special about this boat compared to others. Comment if equipment is not working, not used or used in unusual way. Describe fishing gear if different to equipment you see on other purse seiners and record make, model, special characteristics and usage of new gear.

### SPC/FFA REGIONAL PURSE SEINE OBSERVER

**FORM PS - 1** (pg 2)

DEV. DE0.40		GENE	ERAL	INFO	RMATI	ON						<i>,</i>
REV. DEC 16 OBSERVER NAME		VES	SELNAME						OBSERV	ER TRIP II	NUMBER	
TOTAL POSSIB	LE FISH STOR	AGE CAP	ACITY	(in me	tric tonr	nes):		$\longrightarrow$			r	mT
CREW	ΥI	RS.EXP	NAT	TIONALITY			COI	MMENTS	3			
CAPTAIN								License No.				
MASTER								License No.				
NAVIGATOR												
MATE												
CHIEF ENGINEER												
ASSISTANT ENGINEER												
DECKBOSS												
СООК												
HELICOPTER PILOT												
HELICOPTER MECHANIC												
RADIO OPERATOR												
SKIFF MAN												
WINCHMAN												
TRANSLATOR												
CREW NAME	YI	RS.EXP N	NATIONAI	LITY	CREW	l N	AME		YRS.EXP	N/	ATIONALI	TY
TOTAL N	UMBER OF CRE	EW (inclu	ide Cap	otain a	nd office	ers):		<b>→</b>				
WASTE DISPOSAL SYSTEM? Y / N SAFETY EQUIPMENT												
DESCRIBE waste disposal s					ACKET			OR OBSER	VER: V	/ N / O	Numb	per of
	waste.			LIFE	ACKEI	11101	VIDED 1	SUITABLE		/ / N	LIFE B	
			LABILITY cle one)	Easy		Moderate		ard	LIFE	RINGS		
					RAFTS	Easy		2	П			
	Num	Number of		1			3		4 Number			
	Inspec	people and Inspection due		Number		Numbe	Number.					
				last	e(D) or date of	YY/ MM (	Lor D)	YY / MM (L	or D) YY / M	MM (Lor D)	YY / MM	(Lor D)
					ction (L)	Tot al No.	No. with	n Exp. Batteries	EPIRB	Total No.	No. with Exp	. Batteries
				EPIR	B (406)			p. Dattones	(other)	70.01140.	. тол шин дар	
COMMENTS or DRAWI	NGS of WELL PA	TTERN										

	GENERAL INFORMATION	Notes on Form PS-1 (pg.2)
REV. DEC 2016		
OBSERVER NAME	Print your name in full. Put your first name, or Christian name, first and lyour	r last name, or surname, last.
VESSEL NAME	Print the vessel's name in full as stated on its fishing licence. Don't use any ab	
OBSERVER TRIP ID N	Fill in your trip identification number as supplied by your programme before and elsewhere.	departure - exactly as on PS-1 (pg.1)
CREW		
(for listed specialist positions) NAME	helicopter pilot" next to "helicopter mechanic".	ey hold)". E.g.: if Joe Flyer is both r Pilot" and write "same as vessel does not have any one in the name of that position followed by a
(for non-speci positions) YEARS EXPERIENCE (YRS.EXP)	Record the number of years experience the crew member or officer has <b>in this</b> been fishing on purse seine vessels for 20 years but has only been a Fishing Ca	position. E.g.: if the Captain has
NATIO NALITY	<ul> <li>years write in "5".</li> <li>Nationality should be available on the crew list. Pay special attention to the n amongst the crew.</li> <li>Record any information about the crew in this column. Any relevant informat</li> </ul>	
COMMENTS	Examples could include: name of boat previously worked; name of Fishery Co family connection; etc.	
License No.s (Captain / Master / Navigator)	To be recorded if readily available but not necessary if obtaining it will in any	=
TO TAL NUMBER O	nin the crew twice.	
and officers)	This is an easy mistake to make in situations where one crew person has two	different positions. Be Careful!
WAS TE DIS POS AI S YS TEM	Circle "Y" or "N" (yes or no) to show if the vessel has equipment and / or following fish offal or other waste.  Examples of equipment of equipment include incinerators, crushers, shredders Example of procedures might be keeping all plastic waste until the end of the tare used and how effectively they are used in your trip report. (i.e., what polyvessel have?)	, compacters, balers, meal plants, etc.
SAFETY EQUIP		
LIFE JACKET	If observer has their own (or a fisheries) life jacket (LJ), the "O" must be circle Otherwise circle the "Y" or "N" to show if the vessel showed the observer a L emergency. Also circle the "Y" or "N" to show if the LJ the vessel offered was allocated L.J was easily available, "moderate" ift not so easy to get to, or "hard an emergency.	J that they could use in an s a suitable size. Circle "easy" if the
EPIRBS LIFEBUOYS / LIFE RIN	Count all EPIRBs together (with or without expired batteries). Then count on Only record information for EPIRBs that are easily accessible (not found in lif Count all lifebuoys and life rings that can be found	
LIFE RAFIS	Find info on labels on life-rafts. If, <b>after a careful check</b> , dates are not found displayed'.	l, record "ND" for 'dates not

#### FORM PS - 2

### SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

REV. DEC. 2016

OBSERVER NAME **VESSEL NAME** OBSERVER TRIP ID NUMBER PAGE OF SHIP'S LATITUDE LONGITUDE EEZ WIND SCHOOL SFA HOW **ACTIVITY COMMENTS** START OF DAY TIME (dd°mm.mmm') S (ddd°mm.mmm') W CODE (kts) (°) C-S-M-R-V CODE DETECT (and Set No. - from PS-3) ASSOC SHIP's SHIP's DATE TIME UTC UTC DATE TIME ALL MUST BE RECORDED ACTIVITY and HELICOPTER CODES Set If FAD involved be sure 2 Searching to fill out a GEN-5 Form -3 Transit FAD and Floating Object No fishing - Breakdown Information Record No fishing - Bad weather 5 6 In port - please specify Net cleaning set 7 Investigate free school Investigate floating object Deploy - raft, FAD or payao 10R Retrieve - raft, FAD or payao Drifting at day's end 11 10 Drifting with floating object Other reason (specify) 13 Drifting -With fish aggregatting lights Retrieve radio buoy 12 Changing Deploy radio buoy buoys? Transhipping or bunkering use first line Servicing FAD or floating object for 15R and Drifting - No fishing 18 next for 15D Helicoptor takes off to search Helicopter returned from search HOW DETECTED 16 Seen from vessel "Seen from helicopter" Seen from helicopter Use when vessel gets to 3 Marked with beacon the school of tuna 18 Bird radar that helicopter either: 4 1. reported on; or 5 Sonar / depth sounder 19 2. dropped buoy on Info, from other vessel Anchored FAD / payao (recorded) 20 SCHOOL ASSOCIATION (tuna) 21 Unassociated 22 Free schools Feeding on Baitfish Drifting log, debris or dead animal 23 Drifting raft, FAD or payao Anchored raft, FAD or payao 5 DID YOU OBSERVE ANY Anchored floating objects Free floating objects (no anchor) FLOATING OBJECT AND Free **EVENTS TO RECORD** Live whale SCHOOL SIGHTINGS (with NO school) (with school) (with NO school) (with school) schools ON FORM GEN-3 TODAY Live whale shark Tally Tally Tally Tally Tally Journal Other (please specify) Example 8 YES NO No tuna associated No. No. No. No. No. (circle one) pg# 6

Rev. Dec 2016 Observer Name and Vessel Name: Always print each of these names out in full (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959") Observer Trip ID Number: Number is sued by the authority you are working for. (e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03"). Ships Time: Record the "Ship's time" whenever there is a change of an activity. Be sure to record all activities. Record as often as necessary during the day. At the very least, record a morning, noon and evening position when in transit. <u>Latitude</u>, <u>Longitude</u>, N, S, E, W: Record position as degrees, minutes and minutes to three decimal places, which is usually as it is displayed on a GPS. N.B.: dd = degrees; mm = minutes; mmm = decimal minutes. For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°). Never forget to enter north or south and east or west correctly (for example "05°27.985' S, 152°28.239' W")

EEZ Code: Place the code for the EEZ (on back of Form GEN-6) for your position. Use the chart supplied or the chart of the vessel to work this out. If you are not sure then put the code for the EEZ where you think you are.

Wind (kts) (°): Record speed in knots and direction in degrees of the compass (e.g. for a 15 knot easterly wind, under (kts) print "15" and under (°) print "090") If the wind meter shows metres per second then ( $kts = 2 \times m/sec$ ) approximately.

#### Sea conditions (C-S-M-R-V).

C = Calm; S = Slight; M = Moderate; R = Rough; V = Very rough. Judge this yourself. A guide is the wind. If it has been blowing awhile then 0-5 kts is calm; 5-10 kts is slight; 10-20 kts is moderate; 20-40 kts is rough; and anything over 40 kts is usually very rough, however not always so.

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Did You Observe Any Events To Record On Form GEN-3 Today? Circle Yes if any infringements, as listed on Form GEN-3, were observed.

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# SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

REV. DEC. 2016

OBSERVER NAME VESSEL NAM E OBSERVER TRIP ID NUMBER OF PAGE SHIPS LATITUDE Ν LONGITUDE EEZ WIND SEA HOW SCHOOL **ACTIVITY COMMENTS** START OF DAY TIME (dd°mm.mmm') S (ddd°mm.mmm') W CODE CODE (kts) (°) C-S-M-R-V DETECT ASSOC (and Set No. - from PS-3) SHIP's SHIP's DATE TIME UTC UTC DATE TIME ALL MUST BE RECORDED ACTIVITY and HELICOPTER CODES Set If FAD involved be sure Searching 2 to fill out a GEN-5 Form-3 Transit FAD and Floating Object No fishing - Breakdown Information Record No fishing - Bad weather In port - please specify Net cleaning set Investigate free school Investigate floating object Deploy - raft, FAD or payao Retrieve - raft, FAD or payao Drifting at day's end Drifting with floating object Other reason (specify) Drifting -With fish aggregatting lights 15R Retrieve radio buoy 12 Changing Deploy radio buoy buoys? Transhipping or bunkering use first line 13 Servicing FAD or floating object for 15R and Drifting - No fishing next for 15D Helicoptor takes off to search Helicopter returned from search HOW DETECTED Seen from vessel "Seen from helicopter" Seen from helicopter Use when vessel aets to the school of tuna 3 Marked with beacon 18 that helicopter either: 4 Bird radar Sonar / depth sounder 1. reported on; or 2. dropped buoy on Info.from other vessel Anchored FAD / payao (recorded) 20 SCHOOL ASSOCIATION (tuna) 21 Unassociated Free schools 22 Feeding on Baitfish Drifting log, debris or dead animal 23 Drifting raft, FAD or payao Anchored raft, FAD or payao DID YOU OBSERVE ANY Anchored floating objects Free floating objects (no anchor) Free FLOATING OBJECT AND **EVENTS TO RECORD** Live whale SCHOOL SIGHTINGS (with NO school) (with school) (with NO school) (with school) schools ON FORM GEN-3 TODAY Live whale shark Tally Tally Tally Journal Example Tally Other (please specify) YES NO No tuna associated No. No. No. No. No. (circle one) pg# 6

Observer Name and Vessel Name: Always print each of these names out in full (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

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<u>Latitude</u>, <u>Longitude</u>, N, S, E, W: Record position as degrees, minutes and minutes to three decimal places, which is usually as it is displayed on a GPS. N.B.: dd = degrees; mm = minutes; mmm = decimal minutes.

For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°). Never forget to enter north or south and east or west correctly

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EEZ Code: Place the code for the EEZ (on back of Form GEN-6) for your position. Use the chart supplied or the chart of the vessel to work this out. If you are not sure then put the code for the EEZ where you think you are.

Wind (kts) (°): Record speed in knots and direction in degrees of the compass (e.g. for a 15 knot easterly wind, under (kts) print "15" and under (°) print "090") If the wind meter shows metres per second then (kts = 2 x m/sec) approximately.

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# SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

REV. DEC. 2016

VESSEL NAME OBSERVER TRIP ID NUMBER OBSERVER NAME PAGE OF SHIP'S LATITUDE Ν LONGITUDE Е EEZ WIND SCHOOL **ACTIVITY** SEA HOW COMMENTS START OF DAY TIME (dd°mm.mmm') S (ddd°mm.mmm') W CODE (°) CODE (kts) C-S-M-R-V DETECT **ASSOC** (and Set No. - from PS-3) SHIP's SHIP's TIME DATE UTC UTC DATE TIME ALL MUST BE RECORDED ACTIVITY and HELICOPTER CODES Set If FAD involved be sure 2 Searching to fill out a GEN-5 Form -3 Transit FAD and Floating Object No fishing - Breakdown 4 Information Record No fishing - Bad weather In port - please specify Net cleaning set Investigate free school 8 Investigate floating object Deploy - raft, FAD or payao Retrieve - raft, FAD or payao 11 Drifting at day's end Drifting with floating object Other reason (specify) Drifting -With fish aggregatting lights Retrieve radio buoy Changing 15D Deploy radio buoy buoys? Transhipping or bunkering use first line 17 Servicing FAD or floating object for 15R and Drifting - No fishing next for 15D Helicoptor takes off to search Helicopter returned from search HOW DETECTED Seen from vessel "Seen from helicopter" Seen from helicopter Use when vessel gets to Marked with beacon 3 the school of tuna 18 Bird radar that helicopter either: 4 1. reported on; or Sonar / depth sounder 2. dropped buoy on Info. from other vessel Anchored FAD / payao (recorded) 20 21 SCHOOL ASSOCIATION (tuna) Unassociated Free schools 22 Feeding on Baitfish Drifting log, debris or dead animal 23 Drifting raft, FAD or payao Anchored raft, FAD or payao DID YOU OBSERVE ANY Anchored floating objects Free floating objects (no anchor) Free FLOATING OBJECT AND Live whale **EVENTS TO RECORD** SCHOOL SIGHTINGS (with NO school) (with school) (with NO school) (with school) schools ON FORM GEN-3 TODAY Live whale shark Example Tally Tally Tally Tally Tally Journal Other (please specify) YES NO No tuna associated No. No. No. No. No. (circle one) pg# 6

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# SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

REV. DEC. 2016

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### FORM PS - 2

## SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

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### FORM PS - 2

## SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

REV. DEC. 2016

Rev. Dec 2016 Observer Name and Vessel Name: Always print each of these names out in full (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959") Observer Trip ID Number: Number is sued by the authority you are working for. (e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03"). Ships Time: Record the "Ship's time" whenever there is a change of an activity. Be sure to record all activities. Record as often as necessary during the day. At the very least, record a morning, noon and evening position when in transit. <u>Latitude</u>, <u>Longitude</u>, N, S, E, W: Record position as degrees, minutes and minutes to three decimal places, which is usually as it is displayed on a GPS. N.B.: dd = degrees; mm = minutes; mmm = decimal minutes. For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°). Never forget to enter north or south and east or west correctly (for example "05°27.985' S, 152°28.239' W")

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### FORM PS - 2

## SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

REV. DEC. 2016

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<u>School Association</u> (tuna): Use "School Association" code that best describes if <u>tuna</u> being targetted are with floating object, animal, feeding on baitfish, unassociated.

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Observer Name and Vessel Name: Always print each of these names out in full (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

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<u>Latitude</u>, <u>Longitude</u>, <u>N</u>, <u>S</u>, <u>E</u>, <u>W</u>: Record position as degrees, minutes and minutes to three decimal places, which is usually as it is displayed on a GPS.
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For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°).
Never forget to enter north or south and east or west correctly

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Use 15R and 15D when vessel retrieves or deploys a buoy set on FAD or  $\log$ 

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Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

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<u>School Association</u> (*tuna*): Use "School Association" code that best describes if *tuna* being targetted are with floating object, animal, feeding on baitfish, unassociated. If it is an unusual **tuna** association comment here and describe in journal.

### FORM PS - 2

## SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

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Rev. Dec 2016 Observer Name and Vessel Name: Always print each of these names out in full (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959") Observer Trip ID Number: Number is sued by the authority you are working for. (e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03"). Ships Time: Record the "Ship's time" whenever there is a change of an activity. Be sure to record all activities. Record as often as necessary during the day. At the very least, record a morning, noon and evening position when in transit. <u>Latitude</u>, <u>Longitude</u>, N, S, E, W: Record position as degrees, minutes and minutes to three decimal places, which is usually as it is displayed on a GPS. N.B.: dd = degrees; mm = minutes; mmm = decimal minutes. For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°). Never forget to enter north or south and east or west correctly (for example "05°27.985' S, 152°28.239' W")

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VESSEL NAME OBSERVER TRIP ID NUMBER OBSERVER NAME PAGE OF SHIP'S LATITUDE Ν LONGITUDE Е EEZ WIND SCHOOL **ACTIVITY** SEA HOW **COMMENTS** START OF DAY TIME (dd°mm.mmm') S (ddd°mm.mmm') W CODE (°) CODE (kts) C-S-M-R-V DETECT **ASSOC** (and Set No. - from PS-3) SHIP's SHIP's TIME DATE UTC UTC DATE TIME ALL MUST BE RECORDED ACTIVITY and HELICOPTER CODES Set If FAD involved be sure 2 Searching to fill out a GEN-5 Form -3 Transit FAD and Floating Object No fishing - Breakdown 4 Information Record No fishing - Bad weather In port - please specify Net cleaning set Investigate free school 8 Investigate floating object Deploy - raft, FAD or payao Retrieve - raft, FAD or payao 11 Drifting at day's end Drifting with floating object Other reason (specify) Drifting -With fish aggregatting lights Retrieve radio buoy Changing 15D Deploy radio buoy buoys? Transhipping or bunkering use first line 17 Servicing FAD or floating object for 15R and Drifting - No fishing next for 15D Helicoptor takes off to search Helicopter returned from search HOW DETECTED Seen from vessel "Seen from helicopter" Seen from helicopter Use when vessel gets to Marked with beacon 3 the school of tuna 18 Bird radar that helicopter either: 4 1. reported on; or Sonar / depth sounder 2. dropped buoy on Info. from other vessel Anchored FAD / payao (recorded) 20 21 SCHOOL ASSOCIATION (tuna) Unassociated Free schools 22 Feeding on Baitfish Drifting log, debris or dead animal 23 Drifting raft, FAD or payao Anchored raft, FAD or payao DID YOU OBSERVE ANY Anchored floating objects Free floating objects (no anchor) Free FLOATING OBJECT AND Live whale **EVENTS TO RECORD** SCHOOL SIGHTINGS (with NO school) (with school) (with NO school) (with school) schools ON FORM GEN-3 TODAY Live whale shark Example Tally Tally Tally Tally Tally Journal Other (please specify) YES NO No tuna associated No. No. No. No. No. (circle one) pg# 6

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REV. DEC. 2016

VESSEL NAME OBSERVER TRIP ID NUMBER OBSERVER NAME PAGE OF SHIPS LATITUDE Ν LONGITUDE Ε EEZ WIND SEA HOW SCHOOL **ACTIVITY COMMENTS** START OF DAY TIME (dd°mm.mmm') S (ddd°mm.mmm') W CODE CODE (kts) C-S-M-R-V DETECT ASSOC (and Set No. - from PS-3) SHIP's SHIP's DATE TIME UTC UTC DATE TIME ALL MUST BE RECORDED ACTIVITY and HELICOPTER CODES Set If FAD involved be sure Searching to fill out a GEN-5 Form -Transit FAD and Floating Object No fishing - Breakdown Information Record No fishing - Bad weather In port - please specify Net cleaning set Investigate free school Investigate floating object Deploy - raft, FAD or payao Retrieve - raft, FAD or payao Drifting at day's end 10 Drifting with floating object Other reason (specify) Drifting -With fish aggregatting lights Retrieve radio buoy Changing Deploy radio buoy buoys? Transhipping or bunkering 13 use first line Servicing FAD or floating object for 15R and 18 Drifting - No fishing next for 15D 14 Helicoptor takes off to search Helicopter returned from search HOW DETECTED 16 Seen from vessel "Seen from helicopter" Seen from helicopter Use when vessel gets to Marked with beacon the school of tuna Bird radar that helicopter either: 1. reported on; or Sonar / depth sounder 2. dropped buoy on Info. from other vessel Anchored FAD / payao (recorded) 20 SCHOOL ASSOCIATION (tuna) 21 Unassociated Free schools 22 Feeding on Baitfish Drifting log, debris or dead animal 23 Drifting raft, FAD or payao Anchored raft, FAD or payao DID YOU OBSERVE ANY Anchored floating objects Free floating objects (no anchor) Free FLOATING OBJECT AND Live whale 6 **EVENTS TO RECORD** SCHOOL SIGHTINGS (with school) (with school) (with NO school) (with NO school) schools ON FORM GEN-3 TODAY Live whale shark Example Tally Tally Tally Tally Tally Journal Other (please specify) YES NO No tuna associated No. No. No. No. No. (circle one) pg# 6

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Observers should record Ship's time in all other forms and paperwork.

<u>EEZ Code</u>: Place the code for the EEZ (on back of Form GEN-6) for your position.Use the chart supplied or the chart of the vessel to work this out.If you are not sure then put the code for the EEZ where you think you are.

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For codes 1, 8, 9 or <u>17</u> always use school association (tuna) and how detected codes, otherwise the school association (tuna) and how detected code fields must be dashed!

Use 15R and 15D when vessel retrieves or deploys a buoy set on FAD or log

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REV. DEC. 2016

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Observer Name and Vessel Name: Always print each of these names out in full (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959") Observer Trip ID Number: Number is sued by the authority you are working for. (e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03").

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<u>Latitude</u>, <u>Longitude</u>, N, S, E, W: Record position as degrees, minutes and minutes to three decimal places, which is usually as it is displayed on a GPS. N.B.: dd = degrees; mm = minutes; mmm = decimal minutes. For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°). Never forget to enter north or south and east or west correctly

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### FORM PS - 2

## SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

REV. DEC. 2016

OBSERVER NAME **VESSEL NAME** OBSERVER TRIP ID NUMBER PAGE OF SHIP'S LATITUDE LONGITUDE EEZ WIND SCHOOL SFA HOW **ACTIVITY COMMENTS** START OF DAY TIME (dd°mm.mmm') S (ddd°mm.mmm') W CODE (kts) (°) C-S-M-R-V CODE DETECT (and Set No. - from PS-3) ASSOC SHIP's SHIP's DATE TIME UTC UTC DATE TIME ALL MUST BE RECORDED ACTIVITY and HELICOPTER CODES Set If FAD involved be sure 2 Searching to fill out a GEN-5 Form -3 Transit FAD and Floating Object No fishing - Breakdown Information Record No fishing - Bad weather 5 6 In port - please specify Net cleaning set 7 Investigate free school Investigate floating object Deploy - raft, FAD or payao 10R Retrieve - raft, FAD or payao Drifting at day's end 11 10 Drifting with floating object Other reason (specify) 13 Drifting -With fish aggregatting lights Retrieve radio buoy 12 Changing Deploy radio buoy buoys? Transhipping or bunkering use first line Servicing FAD or floating object for 15R and Drifting - No fishing 18 next for 15D Helicoptor takes off to search Helicopter returned from search HOW DETECTED 16 Seen from vessel "Seen from helicopter" Seen from helicopter Use when vessel gets to 3 Marked with beacon the school of tuna 18 Bird radar that helicopter either: 4 1. reported on; or 5 Sonar / depth sounder 19 2. dropped buoy on Info, from other vessel Anchored FAD / payao (recorded) 20 SCHOOL ASSOCIATION (tuna) 21 Unassociated 22 Free schools Feeding on Baitfish Drifting log, debris or dead animal 23 Drifting raft, FAD or payao Anchored raft, FAD or payao 5 DID YOU OBSERVE ANY Anchored floating objects Free floating objects (no anchor) FLOATING OBJECT AND Free **EVENTS TO RECORD** Live whale SCHOOL SIGHTINGS (with NO school) (with school) (with NO school) (with school) schools ON FORM GEN-3 TODAY Live whale shark Tally Tally Tally Tally Tally Journal Other (please specify) Example 8 YES NO No tuna associated No. No. No. No. No. (circle one) pg# 6

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REV. DEC. 2016

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VESSEL NAME OBSERVER TRIP ID NUMBER OBSERVER NAME PAGE OF SHIP'S LATITUDE Ν LONGITUDE Е EEZ WIND SCHOOL **ACTIVITY** SEA HOW **COMMENTS** START OF DAY TIME (dd°mm.mmm') S (ddd°mm.mmm') W CODE (°) CODE (kts) C-S-M-R-V DETECT **ASSOC** (and Set No. - from PS-3) SHIP's SHIP's TIME DATE UTC UTC DATE TIME ALL MUST BE RECORDED ACTIVITY and HELICOPTER CODES Set If FAD involved be sure 2 Searching to fill out a GEN-5 Form -3 Transit FAD and Floating Object No fishing - Breakdown 4 Information Record No fishing - Bad weather In port - please specify Net cleaning set Investigate free school 8 Investigate floating object Deploy - raft, FAD or payao Retrieve - raft, FAD or payao 11 Drifting at day's end Drifting with floating object Other reason (specify) Drifting -With fish aggregatting lights Retrieve radio buoy Changing 15D Deploy radio buoy buoys? Transhipping or bunkering use first line 17 Servicing FAD or floating object for 15R and Drifting - No fishing next for 15D Helicoptor takes off to search Helicopter returned from search HOW DETECTED Seen from vessel "Seen from helicopter" Seen from helicopter Use when vessel gets to Marked with beacon 3 the school of tuna 18 Bird radar that helicopter either: 4 1. reported on; or Sonar / depth sounder 2. dropped buoy on Info. from other vessel Anchored FAD / payao (recorded) 20 21 SCHOOL ASSOCIATION (tuna) Unassociated Free schools 22 Feeding on Baitfish Drifting log, debris or dead animal 23 Drifting raft, FAD or payao Anchored raft, FAD or payao DID YOU OBSERVE ANY Anchored floating objects Free floating objects (no anchor) Free FLOATING OBJECT AND Live whale **EVENTS TO RECORD** SCHOOL SIGHTINGS (with NO school) (with school) (with NO school) (with school) schools ON FORM GEN-3 TODAY Live whale shark Example Tally Tally Tally Tally Tally Journal Other (please specify) YES NO No tuna associated No. No. No. No. No. (circle one) pg# 6

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Use 15R and 15D when vessel retrieves or deploys a buoy set on FAD or log

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REV. DEC. 2016

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### FORM PS - 2

## SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

REV. DEC. 2016

OBSERVER NAME **VESSEL NAME** OBSERVER TRIP ID NUMBER PAGE OF SHIP'S LATITUDE LONGITUDE EEZ WIND SCHOOL SFA HOW **ACTIVITY COMMENTS** START OF DAY TIME (dd°mm.mmm') S (ddd°mm.mmm') W CODE (kts) (°) C-S-M-R-V CODE DETECT (and Set No. - from PS-3) ASSOC SHIP's SHIP's DATE TIME UTC UTC DATE TIME ALL MUST BE RECORDED ACTIVITY and HELICOPTER CODES Set If FAD involved be sure 2 Searching to fill out a GEN-5 Form -3 Transit FAD and Floating Object No fishing - Breakdown Information Record No fishing - Bad weather 5 6 In port - please specify Net cleaning set 7 Investigate free school Investigate floating object Deploy - raft, FAD or payao 10R Retrieve - raft, FAD or payao Drifting at day's end 11 10 Drifting with floating object Other reason (specify) 13 Drifting -With fish aggregatting lights Retrieve radio buoy 12 Changing Deploy radio buoy buoys? Transhipping or bunkering use first line Servicing FAD or floating object for 15R and Drifting - No fishing 18 next for 15D Helicoptor takes off to search Helicopter returned from search HOW DETECTED 16 Seen from vessel "Seen from helicopter" Seen from helicopter Use when vessel gets to 3 Marked with beacon the school of tuna 18 Bird radar that helicopter either: 4 1. reported on; or 5 Sonar / depth sounder 19 2. dropped buoy on Info, from other vessel Anchored FAD / payao (recorded) 20 SCHOOL ASSOCIATION (tuna) 21 Unassociated 22 Free schools Feeding on Baitfish Drifting log, debris or dead animal 23 Drifting raft, FAD or payao Anchored raft, FAD or payao 5 DID YOU OBSERVE ANY Anchored floating objects Free floating objects (no anchor) FLOATING OBJECT AND Free **EVENTS TO RECORD** Live whale SCHOOL SIGHTINGS (with NO school) (with school) (with NO school) (with school) schools ON FORM GEN-3 TODAY Live whale shark Tally Tally Tally Tally Tally Journal Other (please specify) Example 8 YES NO No tuna associated No. No. No. No. No. (circle one) pg# 6

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Record Ship's date and time and UTC date and time at same moment each day. N.B.: UTC date is sometimes different from Ship's date.

Observers should record Ship's time in all other forms and paperwork.

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REV. DEC. 2016

OBSERVER NAME VESSEL NAM E OBSERVER TRIP ID NUMBER OF PAGE SHIPS LATITUDE Ν LONGITUDE EEZ WIND SEA HOW SCHOOL **ACTIVITY COMMENTS** START OF DAY TIME (dd°mm.mmm') S (ddd°mm.mmm') W CODE CODE (kts) (°) C-S-M-R-V DETECT ASSOC (and Set No. - from PS-3) SHIP's SHIP's DATE TIME UTC UTC DATE TIME ALL MUST BE RECORDED ACTIVITY and HELICOPTER CODES Set If FAD involved be sure Searching 2 to fill out a GEN-5 Form-3 Transit FAD and Floating Object No fishing - Breakdown Information Record No fishing - Bad weather In port - please specify Net cleaning set Investigate free school Investigate floating object Deploy - raft, FAD or payao Retrieve - raft, FAD or payao Drifting at day's end Drifting with floating object Other reason (specify) Drifting -With fish aggregatting lights 15R Retrieve radio buoy 12 Changing Deploy radio buoy buoys? Transhipping or bunkering use first line 13 Servicing FAD or floating object for 15R and Drifting - No fishing next for 15D Helicoptor takes off to search Helicopter returned from search HOW DETECTED Seen from vessel "Seen from helicopter" Seen from helicopter Use when vessel aets to the school of tuna 3 Marked with beacon 18 that helicopter either: 4 Bird radar Sonar / depth sounder 1. reported on; or 2. dropped buoy on Info.from other vessel Anchored FAD / payao (recorded) 20 SCHOOL ASSOCIATION (tuna) 21 Unassociated Free schools 22 Feeding on Baitfish Drifting log, debris or dead animal 23 Drifting raft, FAD or payao Anchored raft, FAD or payao DID YOU OBSERVE ANY Anchored floating objects Free floating objects (no anchor) Free FLOATING OBJECT AND **EVENTS TO RECORD** Live whale SCHOOL SIGHTINGS (with NO school) (with school) (with NO school) (with school) schools ON FORM GEN-3 TODAY Live whale shark Tally Tally Tally Journal Example Tally Other (please specify) YES NO No tuna associated No. No. No. No. No. (circle one) pg# 6

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REV. DEC. 2016

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### FORM PS - 2

## SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

REV. DEC. 2016

OBSERVER NAME **VESSEL NAME** OBSERVER TRIP ID NUMBER PAGE OF SHIP'S LATITUDE LONGITUDE EEZ WIND SCHOOL SFA HOW **ACTIVITY COMMENTS** START OF DAY TIME (dd°mm.mmm') S (ddd°mm.mmm') W CODE (kts) (°) C-S-M-R-V CODE DETECT (and Set No. - from PS-3) ASSOC SHIP's SHIP's DATE TIME UTC UTC DATE TIME ALL MUST BE RECORDED ACTIVITY and HELICOPTER CODES Set If FAD involved be sure 2 Searching to fill out a GEN-5 Form -3 Transit FAD and Floating Object No fishing - Breakdown Information Record No fishing - Bad weather 5 6 In port - please specify Net cleaning set 7 Investigate free school Investigate floating object Deploy - raft, FAD or payao 10R Retrieve - raft, FAD or payao Drifting at day's end 11 10 Drifting with floating object Other reason (specify) 13 Drifting -With fish aggregatting lights Retrieve radio buoy 12 Changing Deploy radio buoy buoys? Transhipping or bunkering use first line Servicing FAD or floating object for 15R and Drifting - No fishing 18 next for 15D Helicoptor takes off to search Helicopter returned from search HOW DETECTED 16 Seen from vessel "Seen from helicopter" Seen from helicopter Use when vessel gets to 3 Marked with beacon the school of tuna 18 Bird radar that helicopter either: 4 1. reported on; or 5 Sonar / depth sounder 19 2. dropped buoy on Info, from other vessel Anchored FAD / payao (recorded) 20 SCHOOL ASSOCIATION (tuna) 21 Unassociated 22 Free schools Feeding on Baitfish Drifting log, debris or dead animal 23 Drifting raft, FAD or payao Anchored raft, FAD or payao 5 DID YOU OBSERVE ANY Anchored floating objects Free floating objects (no anchor) FLOATING OBJECT AND Free **EVENTS TO RECORD** Live whale SCHOOL SIGHTINGS (with NO school) (with school) (with NO school) (with school) schools ON FORM GEN-3 TODAY Live whale shark Tally Tally Tally Tally Tally Journal Other (please specify) Example 8 YES NO No tuna associated No. No. No. No. No. (circle one) pg# 6

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REV. DEC. 2016

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REV. DEC. 2016

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REV. DEC. 2016

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REV. DEC. 2016

VESSEL NAME OBSERVER TRIP ID NUMBER OBSERVER NAME PAGE OF SHIPS LATITUDE Ν LONGITUDE Ε EEZ WIND SEA HOW SCHOOL **ACTIVITY COMMENTS** START OF DAY TIME (dd°mm.mmm') S (ddd°mm.mmm') W CODE CODE (kts) C-S-M-R-V DETECT ASSOC (and Set No. - from PS-3) SHIP's SHIP's DATE TIME UTC UTC DATE TIME ALL MUST BE RECORDED ACTIVITY and HELICOPTER CODES Set If FAD involved be sure Searching to fill out a GEN-5 Form -Transit FAD and Floating Object No fishing - Breakdown Information Record No fishing - Bad weather In port - please specify Net cleaning set Investigate free school Investigate floating object Deploy - raft, FAD or payao Retrieve - raft, FAD or payao Drifting at day's end 10 Drifting with floating object Other reason (specify) Drifting -With fish aggregatting lights Retrieve radio buoy Changing Deploy radio buoy buoys? Transhipping or bunkering 13 use first line Servicing FAD or floating object for 15R and 18 Drifting - No fishing next for 15D 14 Helicoptor takes off to search Helicopter returned from search HOW DETECTED 16 Seen from vessel "Seen from helicopter" Seen from helicopter Use when vessel gets to Marked with beacon the school of tuna Bird radar that helicopter either: 1. reported on; or Sonar / depth sounder 2. dropped buoy on Info. from other vessel Anchored FAD / payao (recorded) 20 SCHOOL ASSOCIATION (tuna) 21 Unassociated Free schools 22 Feeding on Baitfish Drifting log, debris or dead animal 23 Drifting raft, FAD or payao Anchored raft, FAD or payao DID YOU OBSERVE ANY Anchored floating objects Free floating objects (no anchor) Free FLOATING OBJECT AND Live whale 6 **EVENTS TO RECORD** SCHOOL SIGHTINGS (with school) (with school) (with NO school) (with NO school) schools ON FORM GEN-3 TODAY Live whale shark Example Tally Tally Tally Tally Tally Journal Other (please specify) YES NO No tuna associated No. No. No. No. No. (circle one) pg# 6

Observer Name and Vessel Name: Always print each of these names out in full (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")

<u>Observer Trip ID Number</u>: Number issued by the authority you are working for. (e.g. John Masa, on his 3rd trip in 1996 may get Trip ID No.: "JHM 96-03").

<u>Ships Time</u>: Record the "Ship's time" whenever there is a change of an activity. Be sure to record all activities. Record as often as necessary during the day. At the very least, record a morning, noon and evening position when in transit.

 $\underline{\textit{Latitude}}, \underline{\textit{Longitude}}, \underline{\textit{N}}, \underline{\textit{S}}, \underline{\textit{E}}, \underline{\textit{W}} \colon \text{Record position as degrees, minutes and minutes to three decimal places, which is usually as it is displayed on a GPS.}$ 

N.B.: dd = degrees; mm = minutes; mmm = decimal minutes.

For latitude below 10° put a zero in front of the number (e.g.:write 5° as 05°). Never forget to enter north or south and east or west correctly

(for example "05°27.985' S, 152°28.239' W")

<u>Page of</u>: Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc. **At end of trip** check pages are all there (again). Put last page number on every page (e.g. if there are 36 pages then the first page will be "Page 1 of 36", the fourth page, "Page 4 of 36" and the last page will be "Page 36 of 36").

Start of day: At start of each day, date and time on ship's clock (and observer's watch) must be matched to the UTC time and date as read from the GPS. \*\*Always record date as YY/MM/DD.

Ship's Date and Ship's Time: is the date and time used by crew on board normally. The observer's watch should be set to this date and time as soon as they board.

UTC Date and UTC Time: is standard date and time used by scientists to correct the ship's date and time when it is used incorrectly, as it often is.

Record Ship's date and time and UTC date and time at same moment each day. N.B.: UTC date is sometimes different from Ship's date.

Observers should record Ship's time in all other forms and paperwork.

<u>EEZ Code</u>: Place the code for the EEZ (on back of Form GEN-6) for your position.Use the chart supplied or the chart of the vessel to work this out.If you are not sure then put the code for the EEZ where you think you are.

<u>Wind</u> (kts) (°): Record speed in knots and direction in degrees of the compass (e.g. for a 15 knot easterly wind, under (kts) print "15" and under (°) print "090") If the wind meter shows metres per second then (kts =  $2 \times m/sec$ ) approximately.

#### Sea conditions (C-S-M-R-V).

C = Calm; S = Slight; M = Moderate; R = Rough; V = Very rough. Judge this yourself. A guide is the wind. If it has been blowing awhile then 0-5 kts is calm; 5-10 kts is slight; 10-20 kts is moderate; 20-40 kts is rough; and anything over 40 kts is usually very rough, however not always so.

<u>Comments (and Set No. - from PS-3)</u> - for all activity code "1" write the set No. before ther comments in this field. Get "set No." from the PS-3 that must be used every set.

Activity and Helicopter Codes: The activity codes are shown on the front.

Use only one code per entry. If it seems that two different codes could be used, record only the most important one and note the other in comments column.

Please record every activity change throughout the day. There may be many. Note that, except for Helicopter codes, the start of a new activity marked by one

code also means the end of the activity identified by the previous activity code.

For codes 1, 8, 9 or <u>17</u> always use school association (tuna) and how detected codes, otherwise the school association (tuna) and how detected code fields must be dashed!

Use 15R and 15D when vessel retrieves or deploys a buoy set on FAD or log

- if changing buoys use 15R on one line and 15D on the next.

If using **code 16** remember that **transhipment** includes any transfer between vessels Use **code 17** if making any repair or change to floating objects other than changing buoys Helicopter codes: Use whenever helicopter takes off or lands. Comment to describe main activity for each take off / landing - e.g.: search, set buoy, visit other (*named*) vessel, arrive from other (*named*) vessel, visit shore, rescue seaman, etc.

Floating object and school sightings: Through each day try to keep count of every floating objects and free schools. Try to note if floating objects have fish with them or not.

Also count anchored floating objects (FADs or payaos) and note if they have fish.

Note that free schools can be feeding on baitfish or completely unassociated.

This can be a rough but sensible count. It is used to get an idea of life in your area.

Floating objects can include trees, logs, drums, FADs, payaos or other lumps of debris.

Tally: Mark with a stroke every time you sight something (see example on front)

No: Count the "tally" strokes at end of day to get the number of each type of sighting.

<u>How Detected</u>: Use this code to best show how investigated tuna or object was found.
If more than one method used, use code that shows what <u>first</u> made vessel change course to inspect tuna or object (E.g.: If helicopter reports tuna so vessel turns toward its position but had to use its

bird radar to finally find the tuna then use code "2" - seen from helicopter.)

N.B.: usually a depth sounder or sonar is only used to investigate an <u>already found</u> object or fish, so code "5" should not be used very often. It is usually something else that first causes a vessel to change direction to investigate a school or floating object further.

Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.

### <u>Did You Observe Any Events To Record On Form GEN-3 Today</u>?

Circle Yes if any infringements, as listed on Form GEN-3, were observed.

Write notes on Form GEN-3 and in journal; record the journal page No. on this form. If there was no incident for the day circle **No**.

<u>School Association</u> (tuna): Use "School Association" code that best describes if <u>tuna</u> being targetted are with floating object, animal, feeding on baitfish, unassociated. If it is an unusual tuna association comment here and describe in journal.

REV. DEC. 2016

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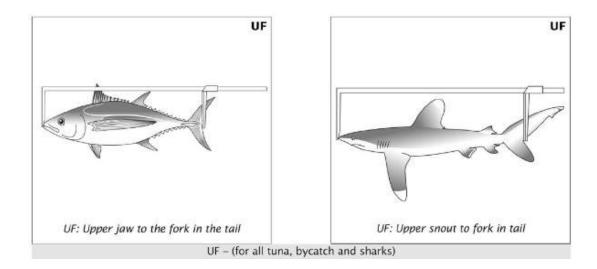
Circle Yes if any infringements, as listed on Form GEN-3, were observed.

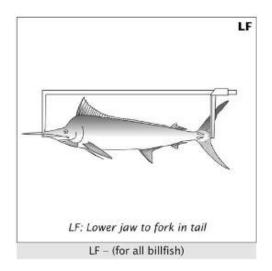
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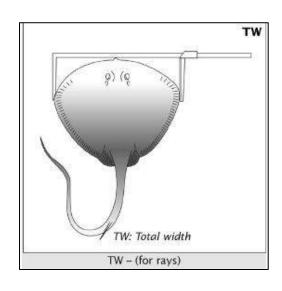
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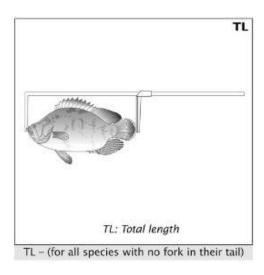
## Purse-Seine Length Measurements

(You may <u>only</u> take these measurements on board a purse-seine vessel)



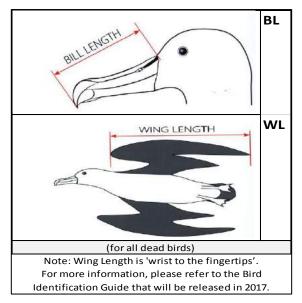


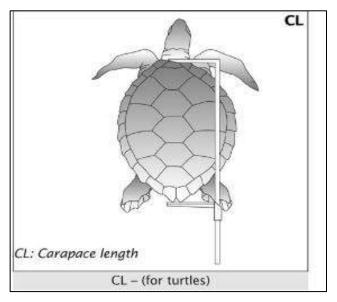




## Purse-Seine Length Measurements

For Species of Special interest -





## **CALIBRATING CALLIPERS**

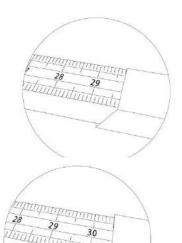
Observers are asked to calibrate their callipers before every purseseine set. This can be done by marking a known length on



the deck. For instance use the ruler of the calliper (<u>not the calliper itself</u>) to mark out 30cm on the deck with a pen etc. Take time to do this properly, then measure that known length with the calliper. Or as the drawing shows, measure a known length on a deck tape. Remember not to use a tape measure made from material as these can stretch in wet conditions.

## IF THE CORRECT CALLIPER READING IS 30 CM.

And the <u>calliper correctly shows 30 cm</u>, then the calibration should be recorded as zero millimetres.



The true length is 30 cm. The calliper is incorrectly reading 29.7 cm. The callibration should be reacord as minus 3 mms.

The true length is 30 cm. The calliper is incorrectly reading 30.5 cm. The callibration should be recorded as plus 5 mms.

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ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DD AH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
SO.	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rags v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			oard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	N PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rags v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			oard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DD AH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rags v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			oard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DD AH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
ĸ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	:C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rags v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			ooard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DD AH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
ĸ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rags v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			ooard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
ĸ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			ooard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			ooard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			oard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DD AH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
SO.	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
ĸ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			oard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
SO.	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
ĸ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	N PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ME:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			oard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
SO.	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ME:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ 00/ TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			oard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
SO.	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
ĸ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	OBS	SERVE	R				F	OR	M P	PS - 3		
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF			
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND 1 MM	IME DD	h	h mm		
									•		•										_			
		l			CT.	ART OF S	- -	1			SET	SEQ	JEN	ICE TIN	/IE	<u>S</u>	END OF	DDAII	LINC /	LENE	05.0	ET (NEVT		
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSI	NG	END PUR	RSING	BE	GIN BRAILII	NG		SACK					ET (NEXT STARTS)		
TIN	ME:																							
								SET	CAT	СН	DETA	ILS												
brail cap	acity sum	of all brai	ls	To	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA	UGH	IT	N.		se calculation ch, whether			tuna in this arded		
	mT x	)	=			mT		C L	'ID		•	YELLO	WFI	N					BIGEY	<u>Έ</u>				
Type 1 b	orail		less b	ycatch	(see be			SKIP- JACK			MALL	L	ARGE	(> 75 cm)			SMALL		LA	RGE (>	> 75 cr	m)		
(see PS-1 fo	+	PS-4 form)	, L			mT	=>	YES	(%)	YES	75 cm) (%)		(%)		ER		(< 75 cn	%)	YES	(%)	NU	MBER		
Type 2 bra	mT x	= Total tuna catch						NO	(70)	NO		YES (%) N				1	10	,,,,	NO	(/0)	(76) NOMBE			
	BY-CATCH (ALL NON-TARGET SPE								2011 4	NIDIN	100)			Targe	of T	Fur	126							
SPECIES	FATE	OBSEF			/ESSE		SSI COI	NDITION	T .				ıт А.	OBSERVE				of	SKJ	YI	÷Τ	BET		
CODE	CODE	(mT)	No.		(mT)	No.	CAUGHT	/ DISCARD	COMM	ENIS	/ SSI TR	EATMEN	11	each spec		augh	t (mT)							
				-												Observer	FATE a.							
				-												å	(mT)							
																Vessel	FATE							
																	(mT)							
																Observer	FATE							
																8	b. (m	T)						
																Vessel	FATE							
																-	(mT)							
																Observer	FATE							
																ö	c. (m	T)						
																Vessel	FATE							
																	(mT)							
Total weight	t of bycatch:		mT	г		mT								B. OBSER discards +			als (mT) (a+b+c	):						
	SPECIES ( teractions with			TERE					COMME	ENTS	/ SSI TRE	ATMEN	Т		٥		FATE							
SPECIES	GEAR INTERACTION	OBSE	RVER		COND	ITION									olun.	RWW	OBS							
CODE	CODE	(mT)	No.	Cap	ptured	Released									r later	if not	(mT) VES							
															ard fo	_	(mT)							
															tonbc		FATE	E F	RWW	RW	/W	RWW		
															Tuna kept onboard for later unload		OBS (m	nT)						
															ĪĒ		VES (mT)							
				$\top$													ar break iitigation		ESC	ES	3C	ESC		
				1										1 "	, Jal	Т	OBS (m	nT)						
How many Tags were recovered?  Record spec									-	bers.						estimates	VES (mT)							
riii lag recovei							, 10111		E CO	ODES						(iiii)								
· ·							FATE CODES ad trunk - fins retained (shark only) ad - too small (tuna only)  DPQ Discarded - poor quality DOR Discarded - other reasons (specify)							()	GEAR INTERACTION CODES									
RGG Ret	tained - gilled	and gutted	l (kept f		e) D	GD Disc	arded - g	led - gear damage (tuna only)  ESC Escaped  led - vessel fully loaded  (use these fate codes for any SSIs landed on deck)						IJO -	IEN - Entangled (in gear) IJO - Jumped out (over net) ICR - Crew released from net									
RCC Ret	tained - partia tained - crew	consumpti	on (onb	oard)	D	US Disc	arded - ι	unwanted	species			DPA - D	)iscar	ded Protecte	ed S	peci	es - Alive		IBR -	Broke	throug	gh net		

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	, ,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDU DD AM DVC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
SO.	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1i	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' <u>must</u> be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
ĸ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number (mT)	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small $\frac{9}{2}$ x Total tuna catch for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC Tuna kept onboard for	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	later unload	If tuna is otherwise retained onboard for later unload (fate = $R$ ??) then A B. = the combined total of RWW + $R$ ??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch, N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	OBS	SERVE	R				F	OR	M P	PS - 3		
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF			
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND 1 MM	IME DD	h	h mm		
									•		•										_			
		l			CT.	ART OF S	- -	1			SET	SEQ	JEN	ICE TIN	/IE	<u>S</u>	END OF	DDAII	LINC /	LENE	05.0	ET (NEVT		
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSI	NG	END PUR	RSING	BE	GIN BRAILII	NG		SACK					ET (NEXT STARTS)		
TIN	ME:																							
								SET	CAT	СН	DETA	ILS												
brail cap	acity sum	of all brai	ls	To	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA	UGH	IT	N.		se calculation ch, whether			tuna in this arded		
	mT x	)	=			mT		C L	'ID		•	YELLO	WFI	N					BIGEY	<u>Έ</u>				
Type 1 b	orail		less b	ycatch	(see be			SKIP- JACK			MALL	L	ARGE	(> 75 cm)			SMALL		LA	RGE (>	> 75 cr	m)		
(see PS-1 fo	+	PS-4 form)	, L			mT	=>	YES	(%)	YES	75 cm) (%)		(%)		ER		(< 75 cn	%)	YES	(%)	NU	MBER		
Type 2 bra	mT x	= Total tuna catch						NO	(70)	NO		YES (%) N				1	10	,,,,	NO	(/0)	(76) NOMBE			
	BY-CATCH (ALL NON-TARGET SPE								2011 4	NIDIN	100)			Targe	of T	Fur	126							
SPECIES	FATE	OBSEF			/ESSE		SSI COI	NDITION	T .				ıт А.	OBSERVE				of	SKJ	YI	÷Τ	BET		
CODE	CODE	(mT)	No.		(mT)	No.	CAUGHT	/ DISCARD	COMM	ENIS	/ SSI TR	EATMEN	11	each spec		augh	t (mT)							
				-												Observer	FATE a.							
				-												å	(mT)							
																Vessel	FATE							
																	(mT)							
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																8	b. (m	T)						
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																Observer	FATE							
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																Vessel	FATE							
																	(mT)							
Total weight	t of bycatch:		mT	г		mT								B. OBSER discards +			als (mT) (a+b+c	):						
	SPECIES ( teractions with			TERE					COMME	ENTS	/ SSI TRE	ATMEN	Т		٥		FATE							
SPECIES	GEAR INTERACTION	OBSE	RVER		COND	ITION									olun.	RWW	OBS							
CODE	CODE	(mT)	No.	Cap	ptured	Released									r later	if not	(mT) VES							
															ard fo	_	(mT)							
															tonbc		FATE	E F	RWW	RW	/W	RWW		
															Tuna kept onboard for later unload		OBS (m	nT)						
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				$\top$													ar break iitigation		ESC	ES	3C	ESC		
				1										1 "	, Jal	Т	OBS (m	nT)						
How many Tags were recovered?  Record spec									-	bers.						estimates	VES (mT)							
riii lag recovei							, 10111		E CO	ODES						(iiii)								
· ·							FATE CODES ad trunk - fins retained (shark only) ad - too small (tuna only)  DPQ Discarded - poor quality DOR Discarded - other reasons (specify)							()	GEAR INTERACTION CODES									
RGG Ret	tained - gilled	and gutted	l (kept f		e) D	GD Disc	arded - g	led - gear damage (tuna only)  ESC Escaped  led - vessel fully loaded  (use these fate codes for any SSIs landed on deck)						IJO -	IEN - Entangled (in gear) IJO - Jumped out (over net) ICR - Crew released from net									
RCC Ret	tained - partia tained - crew	consumpti	on (onb	oard)	D	US Disc	arded - ι	unwanted	species			DPA - D	)iscar	ded Protecte	ed S	peci	es - Alive		IBR -	Broke	throug	gh net		

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDU DD AM DVC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
SO.	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1i	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' <u>must</u> be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
ĸ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number (mT)	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small $\frac{9}{2}$ x Total tuna catch for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC Tuna kept onboard for	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	later unload	If tuna is otherwise retained onboard for later unload (fate = $R$ ??) then A B. = the combined total of RWW + $R$ ??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch, N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	OBS	SERVE	R				F	OR	M P	PS - 3		
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF			
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND 1 MM	IME DD	h	h mm		
									•		•										_			
		l			CT.	ART OF S	- -	1			SET	SEQ	JEN	ICE TIN	/IE	<u>S</u>	END OF	DDAII	LINC /	LENE	05.0	ET (NEVT		
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSI	NG	END PUR	RSING	BE	GIN BRAILII	NG		SACK					ET (NEXT STARTS)		
TIN	ME:																							
								SET	CAT	СН	DETA	ILS												
brail cap	acity sum	of all brai	ls	To	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA	UGH	IT	N.		se calculation ch, whether			tuna in this arded		
	mT x	)	=			mT		C L	'ID		•	YELLO	WFI	N					BIGEY	<u>Έ</u>				
Type 1 b	orail		less b	ycatch	(see be			SKIP- JACK			MALL	L	ARGE	(> 75 cm)			SMALL		LA	RGE (>	> 75 cr	m)		
(see PS-1 fo	+	PS-4 form)	, L			mT	=>	YES	(%)	YES	75 cm) (%)		(%)		ER		(< 75 cn	%)	YES	(%)	NU	MBER		
Type 2 bra	mT x	= Total tuna catch						NO	(70)	NO		YES (%) N				1	10	,,,,	NO	(/0)	(76) NOMBE			
	BY-CATCH (ALL NON-TARGET SPE								2011 4	NIDIN	100)			Targe	of T	Fur	126							
SPECIES	FATE	OBSEF			/ESSE		SSI COI	NDITION	T .				ıт А.	OBSERVE				of	SKJ	YI	÷Τ	BET		
CODE	CODE	(mT)	No.		(mT)	No.	CAUGHT	/ DISCARD	COMM	ENIS	/ SSI TR	EATMEN	11	each spec		augh	t (mT)							
				-												Observer	FATE a.							
				-												å	(mT)							
																Vessel	FATE							
																	(mT)							
																Observer	FATE							
																8	b. (m	T)						
																Vessel	FATE							
																-	(mT)							
																Observer	FATE							
																ö	c. (m	T)						
																Vessel	FATE							
																	(mT)							
Total weight	t of bycatch:		mT	г		mT								B. OBSER discards +			als (mT) (a+b+c	):						
	SPECIES ( teractions with			TERE					COMME	ENTS	/ SSI TRE	ATMEN	Т		٥		FATE							
SPECIES	GEAR INTERACTION	OBSE	RVER		COND	ITION									olun.	RWW	OBS							
CODE	CODE	(mT)	No.	Cap	ptured	Released									r later	if not	(mT) VES							
															ard fo	_	(mT)							
															tonbc		FATE	E F	RWW	RW	/W	RWW		
															Tuna kept onboard for later unload		OBS (m	nT)						
															ĪĒ		VES (mT)							
				$\top$													ar break iitigation		ESC	ES	3C	ESC		
				1										1 "	, Jal	Т	OBS (m	nT)						
How many Tags were recovered?  Record spec									-	bers.						estimates	VES (mT)							
riii lag recovei							, 10111		E CO	ODES						(iiii)								
· ·							FATE CODES ad trunk - fins retained (shark only) ad - too small (tuna only)  DPQ Discarded - poor quality DOR Discarded - other reasons (specify)							()	GEAR INTERACTION CODES									
RGG Ret	tained - gilled	and gutted	l (kept f		e) D	GD Disc	arded - g	led - gear damage (tuna only)  ESC Escaped  led - vessel fully loaded  (use these fate codes for any SSIs landed on deck)						IJO -	IEN - Entangled (in gear) IJO - Jumped out (over net) ICR - Crew released from net									
RCC Ret	tained - partia tained - crew	consumpti	on (onb	oard)	D	US Disc	arded - ι	unwanted	species			DPA - D	)iscar	ded Protecte	ed S	peci	es - Alive		IBR -	Broke	throug	gh net		

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDU DD AM DVC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
SO.	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1i	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' <u>must</u> be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number (mT)	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small $\frac{9}{2}$ x Total tuna catch for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC Tuna kept onboard for	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	later unload	If tuna is otherwise retained onboard for later unload (fate = $R$ ??) then A B. = the combined total of RWW + $R$ ??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch, N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	OBS	SERVE	R				F	OR	M P	PS - 3		
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF			
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND 1 MM	IME DD	h	h mm		
									•		•										_			
		l			CT.	ART OF S	- -	1			SET	SEQ	JEN	ICE TIN	/IE	<u>S</u>	END OF	DDAII	LINC /	LENE	05.0	ET (NEVT		
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSI	NG	END PUR	RSING	BE	GIN BRAILII	NG		SACK					ET (NEXT STARTS)		
TIN	ME:																							
								SET	CAT	СН	DETA	ILS												
brail cap	acity sum	of all brai	ls	To	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA	UGH	IT	N.		se calculation ch, whether			tuna in this arded		
	mT x	)	=			mT		C L	'ID		•	YELLO	WFI	N					BIGEY	<u>Έ</u>				
Type 1 b	orail		less b	ycatch	(see be			SKIP- JACK			MALL	L	ARGE	(> 75 cm)			SMALL		LA	RGE (>	> 75 cr	m)		
(see PS-1 fo	+	PS-4 form)	, L			mT	=>	YES	(%)	YES	75 cm) (%)		(%)		ER		(< 75 cn	%)	YES	(%)	NU	MBER		
Type 2 bra	mT x	= Total tuna catch						NO	(70)	NO		YES (%) N				1	10	,,,,	NO	(/0)	(76) NOMBE			
	BY-CATCH (ALL NON-TARGET SPE								2011 4	NIDIN	100)			Targe	of T	Fur	126							
SPECIES	FATE	OBSEF			/ESSE		SSI COI	NDITION	T .				ıт А.	OBSERVE				of	SKJ	YI	÷Τ	BET		
CODE	CODE	(mT)	No.		(mT)	No.	CAUGHT	/ DISCARD	COMM	ENIS	/ SSI TR	EATMEN	11	each spec		augh	t (mT)							
				-												Observer	FATE a.							
				-												å	(mT)							
																Vessel	FATE							
																	(mT)							
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																8	b. (m	T)						
																Vessel	FATE							
																-	(mT)							
																Observer	FATE							
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																Vessel	FATE							
																	(mT)							
Total weight	t of bycatch:		mT	г		mT								B. OBSER discards +			als (mT) (a+b+c	):						
	SPECIES ( teractions with			TERE					COMME	ENTS	/ SSI TRE	ATMEN	Т		٥		FATE							
SPECIES	GEAR INTERACTION	OBSE	RVER		COND	ITION									olun.	RWW	OBS							
CODE	CODE	(mT)	No.	Cap	ptured	Released									r later	if not	(mT) VES							
															ard fo	_	(mT)							
															tonbc		FATE	E F	RWW	RW	/W	RWW		
															Tuna kept onboard for later unload		OBS (m	nT)						
															ĪĒ		VES (mT)							
				$\top$													ar break iitigation		ESC	ES	3C	ESC		
				1										1 "	, Jal	Т	OBS (m	nT)						
How many Tags were recovered?  Record spec									-	bers.						estimates	VES (mT)							
riii lag recovei							, 10111		E CO	ODES						(iiii)								
· ·							FATE CODES  ad trunk - fins retained (shark only)  ad - too small (tuna only)  DPQ Discarded - poor quality  DOR Discarded - other reasons (specify)							()	GEAR INTERACTION CODES									
RGG Ret	tained - gilled	and gutted	l (kept f		e) D	GD Disc	arded - g	led - gear damage (tuna only)  ESC Escaped  led - vessel fully loaded  (use these fate codes for any SSIs landed on deck)						IJO -	IEN - Entangled (in gear) IJO - Jumped out (over net) ICR - Crew released from net									
RCC Ret	tained - partia tained - crew	consumpti	on (onb	oard)	D	US Disc	arded - ι	unwanted	species			DPA - D	)iscar	ded Protecte	ed S	peci	es - Alive		IBR -	Broke	throug	gh net		

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	, ,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDU DD AM DVC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
SO.	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1i	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' <u>must</u> be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
ĸ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number (mT)	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small $\frac{9}{2}$ x Total tuna catch for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC Tuna kept onboard for	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	later unload	If tuna is otherwise retained onboard for later unload (fate = $R$ ??) then A B. = the combined total of RWW + $R$ ??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch, N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	OBS	SERVE	R				F	OR	M P	PS - 3		
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF			
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND 1 MM	IME DD	h	h mm		
									•		•										_			
		l			CT.	ART OF S	- -	1			SET	SEQ	JEN	ICE TIN	/IE	<u>S</u>	END OF	DDAII	LINC /	LENE	05.0	ET (NEVT		
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSI	NG	END PUR	RSING	BE	GIN BRAILII	NG		SACK					ET (NEXT STARTS)		
TIN	ME:																							
								SET	CAT	СН	DETA	ILS												
brail cap	acity sum	of all brai	ls	To	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA	UGH	IT	N.		se calculation ch, whether			tuna in this arded		
	mT x	)	=			mT		C L	'ID		•	YELLO	WFI	N					BIGEY	<u>Έ</u>				
Type 1 b	orail		less b	ycatch	(see be			SKIP- JACK			MALL	L	ARGE	(> 75 cm)			SMALL		LA	RGE (>	> 75 cr	m)		
(see PS-1 fo	+	PS-4 form)	, L			mT	=>	YES	(%)	YES	75 cm) (%)		(%)		ER		(< 75 cn	%)	YES	(%)	NU	MBER		
Type 2 bra	mT x	= Total tuna catch						NO	(70)	NO		YES (%) N				1	10	,,,,	NO	(/0)	(76) NOMBE			
	BY-CATCH (ALL NON-TARGET SPE								2011 4	NIDIN	100)			Targe	of T	Fur	126							
SPECIES	FATE	OBSEF			/ESSE		SSI COI	NDITION	T .				ıт А.	OBSERVE				of	SKJ	YI	÷Τ	BET		
CODE	CODE	(mT)	No.		(mT)	No.	CAUGHT	/ DISCARD	COMM	ENIS	/ SSI TR	EATMEN	11	each spec		augh	t (mT)							
				-												Observer	FATE a.							
				-												å	(mT)							
																Vessel	FATE							
																	(mT)							
																Observer	FATE							
																8	b. (m	T)						
																Vessel	FATE							
																-	(mT)							
																Observer	FATE							
																ö	c. (m	T)						
																Vessel	FATE							
																	(mT)							
Total weight	t of bycatch:		mT	г		mT								B. OBSER discards +			als (mT) (a+b+c	):						
	SPECIES ( teractions with			TERE					COMME	ENTS	/ SSI TRE	ATMEN	Т		٥		FATE							
SPECIES	GEAR INTERACTION	OBSE	RVER		COND	ITION									olun.	RWW	OBS							
CODE	CODE	(mT)	No.	Cap	ptured	Released									r later	if not	(mT) VES							
															ard fo	_	(mT)							
															tonbc		FATE	E F	RWW	RW	/W	RWW		
															Tuna kept onboard for later unload		OBS (m	nT)						
															ĪĒ		VES (mT)							
				$\top$													ar break iitigation		ESC	ES	3C	ESC		
				1										1 "	, Jal	Т	OBS (m	nT)						
How many Tags were recovered?  Record spec									-	bers.						estimates	VES (mT)							
riii lag recovei							, 10111		E CO	ODES						(iiii)								
· ·							FATE CODES  ad trunk - fins retained (shark only)  ad - too small (tuna only)  DPQ Discarded - poor quality  DOR Discarded - other reasons (specify)							()	GEAR INTERACTION CODES									
RGG Ret	tained - gilled	and gutted	l (kept f		e) D	GD Disc	arded - g	led - gear damage (tuna only)  ESC Escaped  led - vessel fully loaded  (use these fate codes for any SSIs landed on deck)						IJO -	IEN - Entangled (in gear) IJO - Jumped out (over net) ICR - Crew released from net									
RCC Ret	tained - partia tained - crew	consumpti	on (onb	oard)	D	US Disc	arded - ι	unwanted	species			DPA - D	)iscar	ded Protecte	ed S	peci	es - Alive		IBR -	Broke	throug	gh net		

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	, ,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDU DD AM DVC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
SO.	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1i	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' <u>must</u> be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
ĸ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number (mT)	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small $\frac{9}{2}$ x Total tuna catch for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC Tuna kept onboard for	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	later unload	If tuna is otherwise retained onboard for later unload (fate = $R$ ??) then A B. = the combined total of RWW + $R$ ??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch, N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	N PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ME:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			oard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
SO.	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
ĸ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ME:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			oard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
SO.	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
ĸ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ME:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			oard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
ĸ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ME:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			oard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
ĸ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ME:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			ooard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DD AH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
ĸ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ME:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
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				+												Vessel	-	+				
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Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			ooard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
ĸ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ME:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			ooard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
									•		•											
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ME:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
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				+												Vessel	-	+				
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Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			ooard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
SO.	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.   'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form		E 61	DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			ooard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
SO.	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.   'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
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																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form		E 61	DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			ooard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DD AH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
SO.	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form		E 61	DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			ooard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DD AH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
ĸ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form		E 61	DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			ooard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	N PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form		E 61	DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			ooard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	N PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rugs v	.5.6 166	3 701 6			Fill ta	ag recov	ery form		E 61	DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			ooard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DD AH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	N PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rags v	.5.6 166	3 701 6			Fill ta	ag recov	ery form		E 61	DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			ooard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
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				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rags v	.5.6 166	3 701 6			Fill ta	ag recov	ery form		E 61	DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			oard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
ĸ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	N PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
				+												Observer	b. (m					
																	FATE	-			_	
				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	:C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rags v	.5.6 166	3 701 6			Fill ta	ag recov	ery form		E 61	DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			oard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
ĸ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
OBSERVER	TRIP I.D. NU	MBER		(	OBSEF (see F	RVER:	RT OF S			IME D	hh	mm		VESSEL			RT OF SE		TE AND T MM	DD	h	h mm
								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	N PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPF	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	SPECIES FATE OBSERVER VESSEL LOG SSI CONDITION CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimates of												of	SKJ	YF	T	BET					
CODE	DE CODE (mT) No. (mT) No. CAUGHT/DISCARD COMMENTS / SSI TREATMENT A. OBSERVER estimated cach species caught											Ť.	Tì í									
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
				+													(mT)					
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Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
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-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rags v	.5.6 166	3 701 6			Fill ta	ag recov	ery form		E 61	DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			oard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
-	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
OBSERVER									L NAME									PAGE	(SET N	lo.)	OF	
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								•	•		•						•					
		l			СТ	ART OF S	- -	ı			SET	SEQ	JEN	ICE TIN	ME:	<u>S</u>	END OF	DDAII	LINC /	ENI	000	ET (NEXT
EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
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								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPE	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	FATE	OBSEF			/ESSE		SSI COI	NDITION / DISCARD	T .		/ SSI TR	EATMEN	IT A.	OBSERVE				of	SKJ	YF	T	BET
CODE	CODE	(mT)	No.		(mT)	No.	CAUGHT	DISCARD	COMM	EINTS	/ 331 11	.EATIVIEI	4 I	each spec	ies ca	Ť.	Tì í					
																Observer	FATE a.					
																	(mT)					
																Vessel	FAIL					
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				+												Vessel	-	+				
				+												-	(mT)					
				+												Observer	c. (m					
																Ť	FATE	_				
				+												Vessel	-	+				
Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
				+											Tuna kept onboard for later unload		OBS (m	nT)				
															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rags v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			oard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
SO.	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
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EVE	ENT:	if SSI OBS	SERVED Sighted)	(Obs		SKIFF OF		BEGIN	I PURSII	NG	END PUR	RSING	BE	GIN BRAILI	NG		SACK					STARTS)
TIN	ИE:																					
								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
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CODE	CODE	(mT)	No.		(mT)	No.	CAUGHT	DISCARD	COMM	EINTS	/ 331 11	.EATIVIEI	4 I	each spec	ies ca	Ť.	Tì í					
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SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
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	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			oard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
SO.	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
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								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
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Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
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SPECIES	FATE	OBSEF			/ESSE		SSI COI	NDITION / DISCARD	T .		/ SSI TR	EATMEN	IT A.	OBSERVE				of	SKJ	YF	T	BET
CODE	CODE	(mT)	No.		(mT)	No.	CAUGHT	DISCARD	COMM	EINTS	/ 331 11	.EATIVIEI	4 I	each spec	ies ca	Ť.	Tì í					
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																	(mT)					
																Vessel	FAIL					
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Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
															rd for I	=	VES (mT)					
															nboai		FATE		RWW	RW	/W	RWW
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-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rags v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
	tained - partia			oard)			arded - ν arded - υ		•			,		te codes for ded Protecte						Crew r Broke		
ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
SO.	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
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								SET	CAT	СН	DETA	ILS										
brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
	mT x	)	=			mT		S K	(IP-		,	YELLO	WFI	N					BIGEY	Έ		
Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
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_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	deractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
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															nboai		FATE		RWW	RW	/W	RWW
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ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DDAH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

				,	SPC	/FFA	REG		AL PU ET D			INE (	)BS	SERVE	R				F	OR	M P	PS - 3
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brail cap	acity sum	of all brai	ls	Tot	tal cate	ch		(	DBSERV		BREAKDO			L TUNA CA h species	UGF	IT	N.		e calculation ch, whether			tuna in this arded
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Type 1 b	orail	PS-4 form)	less b	ycatch	(see be		=>	_	CK	_	MALL 75 cm)	L	ARGE	(> 75 cm)			SMALL (< 75 cn		LA	RGE (>	· 75 cr	m)
Type 2 bra	+		,	Total	tuna c	mT		YES	(%)	YES	(0/)	YES	(%)	NUMBI	ER	T_	<u> </u>	%)	YES	(%)	NU	MBER
(	mT x	)		· Iotai	turia C	mT		NO		NO		NO				1	10		NO			
	BY-CAT	CH (A	II NO	N-TA	ARGE	T SPE	CIES &	Δ11.9	SSLLA	NDIN	IGS )			Targ	et 1	Γur	as					
SPECIES	FATE	OBSEF			/ESSE		SSI COI	NDITION / DISCARD	T .		/ SSI TR	EATMEN	IT A.	OBSERVE				of	SKJ	YF	T	BET
CODE	CODE	(mT)	No.		(mT)	No.	CAUGHT	DISCARD	COMM	EINTS	/ 331 11	.EATIVIEI	4 I	each spec	ies ca	Ť.	Tì í					
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																	(mT)					
																Vessel	FAIL					
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Total weight	t of bycatch:		<u> </u>											B. OBSER								
_	SPECIES (	OF SPEC	mī I <b>AL IN</b>		ST	mT			00144		/ OO! TD	- 4 - 14 - 14 - 14		discards +	RCC	)	(a+b+c					
SPECIES	teractions with	<del></del>	•	not lan	nded) CONDI	ITION			COMME	=N15	/ SSI TRE	EATMEN	I		load	RWW	FATE					
CODE	INTERACTION CODE	(mT)	RVER No.			Released									ater u	if not R	OBS (mT)					
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															nboai		FATE		RWW	RW	/W	RWW
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															Tuna		VES	+				
																	(mT) ar break	_	ESC	ES	;C	ESC
-				+										t	oycat	Т	itigation OBS (m					
How ma	ny Tags v	vere rec	overe	ed?			rd speci		-	bers.						estimates	VES	,			$\dashv$	
110W IIIa	, rags v	.5.6 166	3 701 6			Fill ta	ag recov	ery form			DEC.					å	(mT)					
	tained - whole	-					arded tru		retained	l (shar	DDES k only)	DPQ		arded - poor		•						ON CODES
	tained - head tained - gilled	-	•		,		arded - t arded - g		•		·)	DOR ESC	Disc Esca	arded - othe aped	er rea	son	s (specify	<b>y</b> )				n gear) (over net)
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ROR Ret	tained - other tained trunk -	reason (sp	pecify)	,	D	SD Disc	carded - s carded - v	shark dar	nage			DPD - D	)iscar	ded Protecte ded Protecte	ed S	peci	es - Dead	t	IRN -	Roped	l, pulle	ed from net se specify

ОВ	SERVER NAME	Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly!
VE	SSEL NAME	Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAG	GE OF	Number each PS-3 form from start until end of trip. Because one PS-3 is used for every set this is also the set No.
	ART of SET Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
DA TIN	TE and Vessel (logsheet)	The exact date and time that the vessel has recorded for this set on their PS Log Sheet. Record as year/month/day.
111	AL .	Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the
If S	SSI Observed (Obs Time Sighted)	net or were landed (i.e not required for sighted SSIs).
	BEGIN SET (SKIFF OFF)	Exact same time as recorded on the daily log (PS-2) and in the "Observer Start of Set Date and Time" section.
( <del>-</del> )	BEGIN PURSING (WINCH ON)	The purse wire will be thrown to the vessel from the skiff, and it will then be attached to the winch.
NC	,	Record the time the winch is switched on.
UE	END PURSING (RINGS UP)	During the winching, a bunch of rings will come on board. Record the time when the last of the rings appears.  This indicates the net has totally enclosed (pursed) the fish and they cannot escape.
SEC	DECDI DD AH DIC	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing
SET SEQUENCE	BEGIN BRAILING END BRAILING / SACK	just record a dash.  Record the time when the vessel finishes brailing. If there was no brailing record the time that the sack was lifted up on to the
S S	ONBOARD	deck.
	END SET (NEXT ACTIVITY START	Next activity START marks end of set (no later than 'skiff comes on board'). Record the activity change on PS -2.
	TOTAL CATCH and TOTAL T	UNA CATCH
	Brail Capacity	Find on the PS-1. Use to calcualte total catch.  'Brail capacity' x 'Sum of all brails' = 'TOTAL CATCH'
	Sum of all brails	After calculating the total number of brails on the PS-4 form (for the same set) transfer your answer here.
	Type 1	if a 2nd brail type is also used for this set samples, estimates of the brail capacity for both brail types must be made.  Fill the 'brail capacity' and the 'sum of all brail' fields for both the 'type 1' and the 'type 2' brails.
	and	Add calculations of total catch from each brail type together to get a single "TOTAL CATCH" figure.
	Type 2	(If there is no 'type 2' brail (which is normal) then simply record a dash in each of the 'type 2' fields
	brails	and all other calculations will be based only on the 'type 1' brail information that is provided.)
	TOTAL CATCH	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	less bycatch	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.  Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH.
	TOTAL TUNA CATCH	This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped <b>alive</b> from net.
	YES or NO	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	OBSERVER's	
κ	BREAKDOWN of %	Carefully eye-estimate the <u>percentage of the TOTAL TUNA</u> for each species (+ each size category for YFT and BET)
IIV.	TOTAL TUNA CAUGHT	N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA! NOT % of that species of tuna.  If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET)
CATCH / CAPTURE DETAILS	Number	If a <b>good</b> estimate (counts) is not easy, dash the 'number' field.  Do not make a rough estimate!
Æ	BY-CATCH	
TU	FOR SPECIES OF SPECIAL	Record every species that lands on deck with the three letter FAO species code.  In the normal manner, record any SSIs that land on deck, estimate total weight and number. Fill in a condition code to indicate the status
CAP	INTEREST	of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recorvering). Use
) H	1. (under 'Bycatch - all non-target	a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). These landed SSIs are no longer recorded on Gen-2 form. Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to
TC	species & all SSI landings)	record length and sex of landed SSIs.
	2. (under SSI 'Interactions with	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area. Use the <b>new gear interaction codes</b> instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive
SET	primary gear- not landed)	and healthy, A2 - alive injured, A3 - alive but dying, D - Dead, U - unknown) under the Condition data fields, for when first
		observed as captured and when released.
	3. Comment / SSI Treatment	Add some notes on how the vessel handled or treated the SSI. Example -'released by lowering net etc'.
	FATE CODE	Use fate codes provided to say what happened to each species landed  Use 1 line per species/fate group.
		Remember that a species may be split into groups each with a different fate code.  REMEMBER - use only one (the best and most informative) code for each line.  Eg: RRU RWW 2 mT  RRU DTS 0.5 mT
	ODCEDVED (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique.
	OBSERVER (mT)	Use mT. For instance if 300 kg of Mahi mahi and 40 kg of wahoo were caught - record 0.3 mt DOL /0.04 mt WAH.
	Number	Only record a number if an accurate count is possible. Large amounts are recorded in "mT". If possible record both.
	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.  Place a dash in the column if they have not recorded the species.
	Number Total weight of bycatch	Calculate from the fields above for observer (important for use in 'Total Tuna' calculation) and vessel bycatch estimates.
	TARGET TUNA	
	A. OBSERVER estimates of total	Calculate the combined large and small <u>%</u> x <u>Total tuna catch</u> for each species (SKJ, YFT and BET)
	FATE	Record fate of discarded tuna or tuna retained for crew consumption (RCC), using fate codes listed at bottom of form.
		Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination.
	OBS (mT)	Record the amounts in metric tonnes.
		Copy the weight, as recorded for each species in the vessel's logsheet.
	VES (mT)	If nothing is recorded in the logsheet place a dash in the data field. If "0" is recorded on the logsheet record "0" here.
	B. OBSERVER totals (mT)	For each species add together the mT amounts that are recorded in the rows 'a.', 'b.' and 'c' to get the total of all the discarded
	discards + RCC	and the retained for crew consumption (RCC) combined for that species.  Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A B.) for each species.
	Tuna kept onboard for later unload	If tuna is otherwise retained onboard for later unload (fate = R??) then A B. = the combined total of RWW + R??
	Due to gear break / bycatch	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar.
	FCC	Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch N.B. This does not

Due to gear break / bycatch ESC Include any live tuna escaped from gear breakage or because vessel trys to release important bycatch. N.B. This does not mitigation include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.

How many tags were Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. recovered? species and tag numbers Record <u>tag number</u> and species. Note tag colour, tagging organisation and any unusual features about condition.

## SPC/FFA REGIONAL PURSE SEINE OBSERVER WELL TRANSFER RECONCILIATION FORM

			WEL	LIKANSFE	RRECONC	ILIAH	ON FC	)KW			
VESSEL NA					OBSERVER NAME				OBSERVER TE	RIPID	PAGE OF
7 20022111									0502		
							VESSEL		DECORDED		
	_		WELL			METRIC	CHANGE	NEW	RECORDED ON		
DATE	=	TIME	ACTIVITY	SOURCE	DESTINATION	TONNES MOVED	? (+/-	CUMULATIVE TOTAL	LOGSHEET?		COMMENT
							/ <b>0</b> )		Y / N		
						1					
				ļ							
WELL AC	TIVIT	Y CODES				SOURCE	. C	ESTINATIO	N VES	SEL CH	ANGE ?
	eceive	ed as desired	catch from a set	on this vessel		"NET"		<well no.=""></well>		+	
				of catch-retention rules	3	"NET"		<well no.=""></well>		+	
		rred betweer	nwells vor cool store			<well no.=""></well>		<well no.=""> "SHORE"</well>		0	
			om another vess	el's hold	<\	essel nam		<well no.=""></well>		+	
TG Gi	iven fr	om well to a	nother vessel's h	old		<well no.=""></well>	•	<vessel name=""></vessel>	•	-	
			om another vess		<\	vessel nam		<well no.=""></well>		+	
				to spoilage, etc.		<well no.=""></well>		"DISC."			
CR	<we< td=""><td>II no.&gt;s</td><td>Record A</td><td>LL CATCH in metric to</td><td>onnes. Use whole nur</td><td>mbers (e.g.</td><td>: 25 ).</td><td></td><td></td><td></td><td></td></we<>	II no.>s	Record A	LL CATCH in metric to	onnes. Use whole nur	mbers (e.g.	: 25 ).				
				the "NEW CUM ULAT							
			to or fro	m the previous "cumul	lative total" (on the pr	evious line	). This is to	nnage that has	been 'added to	o' or 'remo	ved from' the vessel.

## SPC/FFA REGIONAL PURSE SEINE OBSERVER

				WELL TR	ANSFER F	RECON	CILIATION	ON FORM	Л	FURIVI P3-5
VESSEL NAME	2014				OBSERVER NAME				OBSERVER	TRIPID PAGE OF
DATE	TI	ME A	WELL CTIVIT Y CODE)	SOURCE	DESTINATION	METRIC TONNES MOVED	VESSEL CHANGE ? (+/-/0)	NEW CUMULATIVE TOTAL	RECORDED ON LOGSHEET? Y/N	COMMENT
ş										
Date		8		date that the f				•	•	
Time		1		ime the fish w					t least c	one line of data.
	***************************************	†····			•••••	····				nsfer that took place.
Well acti	vitv			-						were transferred to.
code	_	1		-	-				-	vere transferred
Coue	•		_	nthe brailer to			iito your v	vessers w	en, but v	vere transferred
							om. The so	ource code	is relate	d to the well activity
		code th	nat yo	u have recorde	ed. An explan	ation of	the sourc	e informati	ion that s	should be recorded is
		outline	ed to t	he right of the	well activity	code yo	u have us	ed.		
Source	e:	NET: Th	ne fish	has come froi	m the net. Re	cord 'NE	T'.			
		8		ne fish has com						
				E: The fish has	s come from a	vessel.	Record v	essel's full	name ne	ere, including
		numbe			l + l l		l <b>T</b> l +-			·
Destinati	on:	1		-			-	-		information required
Desiliati	O11.				of this form	- on the	same iin	e and to ti	ne rignt	of the related ' well
		activit	***************************************							
	_		•	•		-			•	ir vessel after the
Vesse Chang	-			. See further	•					
Chan	je :	1		•	_			-		er the fish transfer.
New										the fish transfer.
Cumulat Total	ive			vessel's new ' with the amou					e. The fi	gure should be
Recorded logsheet				essel's logsh ecord Y for ye		•	ve record	led the fis	h transfe	er clearly on the
<b>Examples</b> 10/10/11	11	.25	FS	NET	P5	30		30	У	From set, on logsheet
11/10/11		.20	FS	NET	P1	35	+	·	У	See PS-3 form
11/10/11		.20		NET	P2		+	65	У	See PS-3 form
11/10/11		.20	FS Ec	NET		30	+	95	У	See PS-3 form
15/10/11			FS WT	P1	53 51	15 30	+ 0	110 110	N	Not observed, see jnl page 5.
16/10/11		.10	TR	Yasu <sup>#</sup> 2	51 57	40		150	N	
18/10/11		.45	TG	51	Ying <sup>#</sup> 9		+	120	N	See journal page 58 See journal page 62
19/10/11		.55		NET	9111g 9 P7	30	-	·		
20/10/11		.05	FS		P2	35	+	155	N	From set, not on logsheet
WELL ACTIVIT			SR	Yasu#8	P2	20 SOURCE	+	175 Destinatio	N	VESSEL CHANGE ?
		a set on thi	s vessel			"NET"		<well no.=""></well>		+
3		a set solely ween wells	because	of catch-retention ru	les	"NET" <well no.=""></well>		<well no.=""></well>		<b>+</b> 0
UL Unload	ed to ca	nnery o r co				<well no.=""></well>		"SHORE"		-
3		vell from an I to another				<pre><vessel <well="" nam="" no.=""></vessel></pre>		<well no.=""></well>	•	+ -
SR Receiv	ed into v	vell from an	other ve	ssels net		<vessel nam<="" td=""><td></td><td><well no.=""></well></td><td></td><td>+</td></vessel>		<well no.=""></well>		+
DC Discard			**********	ue to spoilage, etc. ell no.>s are wells u	sed by a vessel to c	<well no.=""></well>	at would have	"DISC." been discarded i	f there was n	o WCPFC catch retention CMM.
			They ma	•	ELL ACTIVITY CO	DE = WT, if s	mall fish are s	orted from other	(mixed sized	I fish) wells and into these wells.  uring other Well Activities.

## SPC/FFA REGIONAL PURSE SEINE OBSERVER WELL TRANSFER RECONCILIATION FORM

REVISED MAR. 2014		***	LIKANSFE	K KLOONO			)   \			
VESSEL NAME			-	OBSERVER NAME				OBSERVER TE	RIP ID	PAGE OF
						VESSEL				
DATE	TIME	WELL ACTIVITY CODE	SOURCE	DESTINATION	METRIC TONNES MOVED	CHANGE ? (+/-	NEW CUMULATIVE TOTAL	LOGSHEET ?		COMMENT
						/ <b>0</b> )		Y/N		
VELL ACTIVI	TY CODES				SOURCE	: [	DESTINATIO	N VES	SSEL CH	ANGE ?
	ed as desired ca				"NET"		<well no.=""></well>		+	
		-	f catch-retention rules	5	"NET"		<well no.=""></well>		+ 0	
	erred between we ed to cannery or				<well no.=""></well>		<well no.=""> "SHORE"</well>		-	
	ed to cannery or ed into well from		el's hold	<1	<weii no.=""> vessel nam</weii>		<well no.=""></well>		+	
G Given f	rom well to anot				<well no.=""></well>		<vessel name=""></vessel>		-	
	ed into well from			<\	vessel nam		<well no.=""></well>		+	
DC Discard	led into the sea	from Well due	to spoilage, etc.		<well no.=""></well>	·	"DISC."			
CR <we< td=""><td>:II no.&gt;s</td><td></td><td></td><td>onnes. Use whole nur</td><td></td><td></td><td></td><td></td><td></td><td></td></we<>	:II no.>s			onnes. Use whole nur						
				TIVE TOTAL" by addir lative total" (on the pr						

## SPC/FFA REGIONAL PURSE SEINE OBSERVER

				WELL TR	ANSFER R	ECON	CILIATIO	ON FORM	M			
REVISED MAR.: VESSEL NAME	2014				OBSERVER NAME				OBSERVER	TRIP ID PAGE OF	:	
DATE	TIN	VI E	WELL ACTIVIT Y (CODE)	SOURCE	DESTINATION	METRIC TONNES MOVED	VESSEL CHANGE ? (+/-/0)	NEW CUMULATIVE TOTAL	RECORDED ON LOGSHEET? Y/N	COMMENT	1000100010001	
		L		<u> </u>		1						
Date:		5		date that the f				•				
Time		3		time the fish v ransfer (in or a					it least d	one line of data.		
	~~~~~	<del></del>	~~~~~		***************************************		~~~~~			nsfer that took pla	Ce.	
Well acti	vitv	1		-						were transferred		
code	•	1		•	-				-	were transferred		
			_	n the brailer to			,		,			
							om. The so	ource code	is relate	d to the well activi	ty	
r		1	•		•				ion that	should be recorded	lis	
		8		the right of the	•	-		ed.				
Source	<b>e:</b>	1		n has come froi								
		3	WELL NO.: The fish has come from a well. Record the well number here. VESSEL NAME: The fish has come from a vessel. Record vessel's full name here, including									
		numbers, etc.										
			to the well activity code that has been recorded. The type of destination information required									
Destinati	on:	1	is outlined on the bottom of this form - on the same line and to the right of the related 'well									
		1	activity code'									
	******************************	Use the symbol provided to indicate if they were more or less fish on your vessel after the										
Vesse	ı	1	fish transfer. See further explanations below. You do not have to state the amount.									
Chang		1	( + ) indicates a positive change - there are more fish on your vessel after the fish transfer.									
Change?		3	( - ) indicates a negative change - there are less fish on your vessel after the fish transfer.									
New		<u> </u>	Record the vessel's new 'onboard' total or 'cumulative' total here. The figure should be									
Cumulat		1	consistent with the amounts you have recorded to date.									
Total Recorded	*************	<b> </b>	· · · · · · · · · · · · · · · · · · ·									
logsheet		1	Check the vessel's logsheet to see if they have recorded the fish transfer clearly on the logsheet. Record Y for yes and N for no.									
N		iogsn	eet. K	ecora y tor ye	s and in for no	0.	***************************************				~~~~	
Examples 10/10/11	11	25		NET	0.5	20		20		5		
10/10/11		25	FS	NET	P5	30	+	30	У	From set, on logshe	et	
		.20	FS	NET	P1	35	+	65	У	See PS-3 form	***************************************	
11/10/11		.20	FS	NET	P2	30	+	95	У	See PS-3 form		
11/10/11 15/10/11		.20	FS	NET	53 61	15	+	110	У	See PS-3 form		
		.20	WT	P1	51	30	0	110	N	Not observed, see jnl p		
16/10/11		.10	TR	Yasu <sup>#</sup> 2	57 V: #a	40	+	150	N	See journal page 5		
18/10/11		.45	TG	S1	Ying <sup>#</sup> 9	30	-	120	N	See journal page 6		
19/10/11		25	FS	NET	P7	35	+	155	N	From set, not on logsh	neet	
20/10/11		.05	SR	Yasu# 8	P2	20	+	175	N			
FS Receive			his vessel			SOURCE "NET"		<pre>cwell no.&gt;</pre>	N	VESSEL CHANGE ?		
CR Retained from a set solely because of catch-retention rules "NET" <well no.=""> +</well>												
WT Transferred between wells < well no.> < well no.> 0  UL Unloaded to cannery or cool store < well no.> "SHORE" -						-						
			another ve er vessel's		<1	vessel nam <well no.=""></well>		<well no.=""></well>	•	<del>+</del> -		
SR Receiv	ed into w	vell from a	another ve	ssels net	<	vessel nam	ie>	<well no.=""></well>		+		
DC Discard			*************	ue to spoilage, etc. vell no.>s are wells u	sed by a vessel to co	<well no.=""></well>	~~~~~	"DISC." peen discarded i	f there was n	o WCPFC catch retention C	ММ.	
			These <	well no.>s will be the [	DESTINATION <well< td=""><td>no.&gt;s wher</td><td>n WELL ACTIV</td><td>ITY CODE = CF</td><td>R is used.</td><td>l fish) wells and into these we</td><td></td></well<>	no.>s wher	n WELL ACTIV	ITY CODE = CF	R is used.	l fish) wells and into these we		
				•						uring other Well Activitie		

## **CODES PAGE**

## PURSE-SEINE OBSERVER WORKBOOK

Think about tearing out this page to help you fill in your forms, esp. GEN-5.

## ISO (alpha 2) Country Codes

- AS American Samoa
- AU Australia
- BZ Belize
- CK Cook Islands
- CA Canada
- EC Ecuador
- SV El Salvador
- FM Fed. States of Micronesia
- FJ Fiji Islands
- FR France
- PF French Polynesia
- GU Guam
- ID Indonesia
- IW International Waters
- JP Japan
- TO Kingdom of Tonga
- KI Kiribati
- KR Korea
- LT Lithuania
- CN Mainland China
- MY Malaysia
- MT Malta
- MH Marshall Islands
- NR Nauru
- NL Netherlands
- NZ New Zealand
- NC New Caledonia
- NU Niue
- MR Northern Marianas
- PW Palau
- PA Panama
- PG Papua New Guinea
- PH Philippines
- RU Russia
- SB Solomon Islands
- TK Tokelau
- TV Tuvalu
- TW Chinese Taipei (Taiwan)
- US United States
- VU Vanuatu
- WF Wallis and Futuna
- WS Samoa

## **Origin of FAD**

- 1 Your vessel's deployed this trip
- Your vessel's deployed previous trip
- **3** Other vessel's (owner consent)
- 4 Other vessel's (no owner's consent)
- 5 Other vessel's (consent unknown)
- 6 Drifting and found by your vessel
- 7 Deployed by FAD auxillary vessel
- 8 Origin unknown
- 9 Other origin (please specify)

## FAD MATERIALS

## **Main Materials**

- 1 Logs, trees or debris tied together
- 2 Timber / planks / pallets / spools
- 3 PVC or Plastic tubing
- 4 Plastic drums
- 5 Plastic sheeting
- 6 Metal drums (i.e. 44 gal)
- 7 Philippines design drum FAD
- 8 Bamboo / Cane
- 9 Floats / Corks
- 10 Unknown (describe)

### FAD MATERIALS

## **FAD Attachments**

- 11 Chain, cable rings, weights
- 12 Cord / rope
- 13 Netting hanging underneath FAD
- 14 Bait containers
- 15 Sacking / bagging
- 16 Coconut fronds / tree branches
- 17 Other (describe)

## Floating Object

"as found" or "as left"

- 1 Man made object (Drifting FAD)
- 2 Man made object (Non FAD)
- 3 Tree or log (natural, free floating)
- 4 Tree or log (converted into FAD)
- 5 Debris (flotsam bunched together)
- **6** Dead Animal (specify i.e. whale horse etc.)
- 7 Anchored Raft, FAD, or Payo
- 8 Anchored Tree or Logs
- 9 Other (please specify)
- 10 Man made object (Drifting FAD) changed

## **SPECIES OF SPECIAL INTEREST CODES**

SSI	ALL SPECIES OF SPECIAL INTEREST
ТТХ	All Turtles
TTL	Loggerhead Turtle
LTB	Leatherback Turtle
TUG	Green Turtle
LKV	Olive Ridley Turtle
TTH	Hawksbill Turtle
KEZ	Eastern Pacific Green Turtle (black turtle)
FBT	Flatback turtle

MAM	All Marine Mammals
ODN	Toothed Whales
FAW	False Killer Whale
SHW	Short-Finned Pilot Whale
SPW	Sperm Whale
KPW	Pygmy Killer Whale

DWW Dwarf sperm whale BCW Cuvier's Beaked Whale BBW Blainville's Beaked Whale MEW Melon-headed Whale

SHK	All Sharks
RHN	Whale Shark
OCS	Oceanic White-tip Shark

FAL Silky Shark

RIVIV	Mobula spp.
RMB	Giant Manta
DLP	All Dolphins
DBO	Bottlenose Dolphin

DCO Common Dolphin (short-beaked) Risso's Dolphin DRR Spinner Dolphin DSI DPN Spotted Dolphin

Striped Dolphin RTD Rough-toothed Dolphin

DST

Black-footed albatross DKN DIZ Laysan albatross ALZ **Albatrosses Boobies and Gannets** SZV

PRX Petrels and Shearwaters LRD Gulls, Terns, Skuas

## **GEAR INTERACTION CODES**

IEN - Entangled (in gear) IJO - Jumped out (net closed) ICR - Crew released from net IBR - Broke through net

IHE - Hooked internally (mouth) IDJ - Hooked in jaw (circle hook)

IHD - Hooked deeply - throat or stomach

IHU - Hooked unknown OTH - Other, please specify

V2 Workbook IRN- Roped, pulled through net

### **VESSEL INTERACTION CODES**

IBV - Interaction, beside vessel ION - Interaction, outside net ICF - Interaction, crew feeding

IWF - Interaction, with FADs, but not set on

IDW - Interaction, dead in water ICV - Interaction, collision with vessel ICP - Interaction, collision with propeller ICT - Interaction, collision with tori line FRB - Interaction, feeding on bait during set

IFO - Interaction, feeding on discarded offal IRE - Interaction, resting on vessel, floats or FADs(birds)

OTH - Interaction- other, please specifiy

## SIGHTINGS CODES

SDS - Sighting - Distance Swimming

SBR - Sighting - Breaching

STP - Sighting - Tail slapping or playing SMG - Sighting - Motionless in group SDW - Sighting - Dead in Water SBO - Sighting - Bird overhead

OTH - Sighting - Other, please specify

## SPC/FFA REGIONAL OBSERVER VESSEL AND AIRCRAFT SIGHTINGS / FISH, BUNKERING and OTHER TRANSFERS LOGS

FORM GEN - 1

	VESSEL AND AIRCRAFT SIGHTINGS / FISH, BUNKERING and OTHER TRANSFERS LOGS																
_	REV. DEC. 2016																
OBSE	RVER NAME						VESSEL NAME						OBSERVER	TRIP ID NUM	BER	PAGE OF	
VES	SSEL OR	AIRC	RAFT SIGHTIN	IGS												L	
	SHIP'S				SSEL POSITION		SIGHTED VE	SSEL OR AIRCE	RAFT		COMPASS	DISTANCE	ACTION				
	DATE (MMDD)	TIM E (hh mm)	LATITUDE (dd° mm.mmm')	N S	8	E W	NAME	INTERNATIONAL CALLSIGN	FLA	3 TYPE CODE	BEARING (degrees)	l`	CODE (seen vess)	FRAME #		COMMENTS	
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FIS	H TRANS	SFERR	ING, FISH DU	MP	ING, BUNKERIN	IG I	by OBSERVER'S VESS	EL									
	SHIP'S	TIME	OBSERVER		ESSEL POSITION			ER VESSEL FISH TRANSF				RANSFER	ERRED (circle units)				
	DATE (MMDD)	TIM E	LATITUDE	N		E W	NA ME	INTERNATIONAL	FLA	TYPE	SKJ	YFT . WGT. NO	BET	WCT NO	CODE (host vess)	COMMENTS	
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VI	SSEL AN	DAIRC	RAFT <u>Type Co</u> e	ES			FLAG COUNTRY CODES	<u> </u>		ACTION	CODES			ALL WE'C	LTC MUC	T DE METRIC TONA	NEC.
1 2		PURSE SI	EINE 8 SEARCH, A 9 FISH CARF	NCI	HOR OR LIGHT BOAT	1	• IF COUNTRY IS NOT IN LIST WRITE	NAME OF COUNTRY		ACTION CODES.     FISHING INCLUDES ANY FISHING RELATED     ACTIVITY NOT OTHERWISE COVERED HERE					NEO		
3		ND LINE	10 TRAWLER				CN CHINA US USA	BZ BELIZE			REC	<u>EIVING</u>	GIV		INC FIGURE	om hold in one baset as built	n other)
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6 7	NET BC BUNKE		22 HELICOPTE				KR KOREA HN HONDURA:	S LK SRILANKA VU VANUATU		IF NOT FISHI OF DUMPING	FISH	BUNKERING		BUNKERING			
31 OTHER - please specify:							OR OTHERspecify OG OTHER										

Rev. DEC 2016 Notes on FORM GEN - 1

Sighting vessels is a very important surveillance role of observers. If vessels are seen that could possibly be fishing illegally, record as much detail as possible. Don't hesitate to contact the "Observer Co-ordinator" at FFA or your local fishery division, by telex, fax or email, immediately you see such activity. Include all information about the vessel and its activities. An example of the format to use when reporting a sighting to FFA is at the bottom of this page. Please follow the format, and add any other comments at the end of the message.

Observer Name	Put first name first and last name last. Print name in full.
Vessel Name	Put vessel's full name. Names <u>must not</u> be abbreviated.
Observer Trip ID	Same on all Forms - issued to observer before leaving port.
Page of	If there is more than one page for the trip, number each page.

#### SIGHTED VESSEL OR AIRCRAFT

Be as thorough as you possibly can when filling this section of the form. Any small piece of information can assist in identifying the vessel. This is especially important if you can not see the name or call sign. If you can not get some information because it is not visible or impossible to work out, put a dash in the data field.

	· ·				
Date/Time	Ship's date / time at start of sighting or transfer activity (dd/mm/yy hh:mm				
Latitude dd°mm.mmm' Longitude ddd°mm.mmm'	Take positions from the GPS.  Record in degrees (2 digits for latitude and 3 for longitude), minutes and to 3 decimal place fractions of minutes				
N S &	It is very important to record if latitude is North or South of the equator by writing "N" or "S" beside the position.				
EW	Also be sure to note longitude as East or West of the 180° line. These can also be confirmed on the GPS.				
Name (of sighted vessel)	If possible name the vessel you sighted. If you can't see the name properly, try to get a few of the letters from the name.				
International Call-sign	If possible get any call signs or numbers that are visible.				
Flag	Try to find out the flag country - often written on stern.				
Type Code	"Vessel and aircraft <b>type codes</b> " are on front of Form. E.g.: purse -seiner = 1; longliner = 2; etc.				
Compass bearing (degrees) and Distance (nautical miles)	Check compass and radar for a bearing and an exact distance from the observer's vessel to the other vessel. Estimate the distance if the radar is not available.				
Action Code (seen vess)	In this section the "action code" describes the activity the sighted (seen) vessel is involved in when it was observed.  If unsure of the best code, describe the activity in "comments".				
Photo Frame #	If taking a photo, record the camera's photo frame number.				
Comments	Comments about the sighted vessel or aircraft that have not been covered on the form. (E.g., distinguishing features such as colour, hull design or shape, bridge position, etc.). Be as thorough as possible as this will help identify the vessel later, especially if you can not get a name or call-sign.				

#### FISH TRANSFERRING, FISH DUMPING, BUNKERING by OBSERVER'S VESSEL

	,					
Other vessel name		Name of any other vessel that is involved in a transfer				
Our	CI VC33CI HailiC	operation with the observer's vessel.				
Inte	rnational callsign	The call-sign that should be visibly painted on the other vessel				
Tvn	e Code	Use the "Vessel and aircraft type codes" on front of this form to				
тур	e Code	describe what type of vessel is receiving the fish.				
	SkipJack Weight	Total Weight of Skipjack that has been transferred				
	Yellowfin weight	Total Weight of Yellowfin that has been transferred				
RR	Bigeye Weight	Total Weight of Bigeye that has been transferred				
TRANSFE		Record the species code for any other type of species that are				
SS	"Blank" Weight	being transferred. Recording 'mixed' species is an option,				
R		especially on purse seiners.				
9 .	Action Code	See codes on front of Form.				
FISH	Comments	Comment about the transfer activities that take place				
	Comments	(e.g.: method used; problems; destination of the fish; etc.)				

#### CODES

Vessel & Aircraft type codes	To make recording easier, each type of vessel has a unique number code (see code table). Be careful using number codes.
Action Codes (host vess)	Here describe the activity of the observer's vessel. If with another vessel be sure to use a code that shows whether the observer's (host) vessel receives ("_R") or it gives ("_G") items.
Host vessel = vessel that	If more than one action is taking place record the most important (usually to do with fish transfer) in the "ACTION" column and the second action code in the comments column.
observer is on.  Use the "?R" codes if host vessel is receiving fish or items from another vessel. Use the "?G" codes if the host vessel is giving fish or items to another vessel	TR, TG - transferring fish between vessel holds SR, SG - set sharing - when vessel has too many fish after all wells are filled (usually from its last set) and another vessel is invited to brail the remaining fish from the its net. BR, BG - bunkering - when one vessel takes fuel from another OR, OG - other - if vessels meet to transfer other items DF - dumping fish - because bad, damaged or too many
Flag Country Codes	Try to identify country that vessel comes from either by seeing the actual flag flying or by the home-port name on the stern.

#### Report Format Example.

To FFA Observer Co-ordinator

sighting - Jun. 23-1400Z- - Pos. 0512345S -15612233E Moon-shadow -Q2344 flag KR - type 2 - dir. 180 - dis 3 act fi photo Xtra large green stripe on hull. Regards. "observer name"

This explains that on 23rd June a Korean longline vessel was sighted fishing at the position with latitude: 05°12.345'S and longitude: 156°12.233'E. The name of the vessel is *Moonshadow* and its callsign is Q2344. It has a large green stripe on the hull and a photo has been taken by the observer.

## SPC/FFA REGIONAL OBSERVER VESSEL AND AIRCRAFT SIGHTINGS / FISH, BUNKERING and OTHER TRANSFERS LOGS

FORM GEN-1

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	SHIP'S	TIME	OBSERVER'S	VE	SSEL POSITION		SIGHTED VE	SSEL OR AIRCE	RAFT		COMPASS	DISTANCE	ACTION	DUIGTO			
	DATE		LATITUDE	Ν	LONGITUDE	ĪΕ		INTERNATIONAL FLAG TYP		TYPE	BEARING		CODE	PHOTO		COMMENTS	
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	DATE		LATITUDE	Ν	LONGITUDE	E		INTERNATIONAL		TYPE	SKJ	YFT	BET	1	CODE	COMMENTS	
	DATE	TIME					NAME		FLA	G I					(host	CONTRACT VIC	
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VE	VESSEL AND AIRCRAFT TYPE CODES					1	FLAG COUNTRY CODES			ACTION				ALL WEIG	нтѕ м из	ST BE METRIC TONNES	
1							<ul> <li>IF COUNTRY IS NOT IN LIST WRITE</li> </ul>	ENAME OF COUNTRY				FISHING RELAT	ED				
	2 LONGLINE 9 FISH CARRIER					-	ON CHINA HIS HIS	D7 DEU25		ACTIVITY N	OT OTHERWIS		IN O				
3	3 POLE AND LINE 10 TRAWLER					-	CN CHINA US USA JP JAPAN PH PHILLIPINES	BZ BELIZE S RU RUSSIA		RECEIVING FI FISHING TR TRANSHIPPIN			GIVING PING FISH TG TRANSHIPPING FISH (from hold in one boat to hold in other)				
5						-	TW TAIWAN PA PANAMA	SG SINGAPOR		FI FISHING TR TRANSHIPPIN PF POSSIBLY FISHING SR SET SHARING							
6	NET BO	AT	22 HELICOPT			-	KR KOREA HN HONDURAS			NF NOT FISHING BR BUNKERING							
7	BUNKE	R				wasan		VU VANUATU	J [	F DUMPING	FISH						
			31 OTHER - p	lease	e specify:						OR	OTHERsp	ecify OG	pecify OG OTHER			

Rev. DEC 2016 Notes on FORM GEN - 1

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#### FISH TRANSFERRING, FISH DUMPING, BUNKERING by OBSERVER'S VESSEL

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Oth	er vessel name	Name of any other vessel that is involved in a transfer						
		operation with the observer's vessel.						
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Туре	o Codo	Use the "Vessel and aircraft type codes" on front of this form to						
	e Code	describe what type of vessel is receiving the fish.						
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RR	Bigeye Weight	Total Weight of Bigeye that has been transferred						
TRANSFERRED	"Blank" Weight	Record the species code for any other type of species that are being transferred. Recording 'mixed' species is an option, especially on purse seiners.						
	Action Code	See codes on front of Form.						
FISH	Comments	Comment about the transfer activities that take place (e.g.: method used; problems; destination of the fish; etc.)						

#### **CODES**

00220	
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observer is on.	TR, TG - transferring fish between vessel holds
Use the "?R" codes if host	SR, SG - set sharing - when vessel has too many fish after all
vessel is receiving fish or	wells are filled (usually from its last set) and another vessel is
items from another vessel.  Use the " <b>?G</b> " codes if the	invited to brail the remaining fish from the its net.
host vessel is giving fish	BR, BG - bunkering - when one vessel takes fuel from another
or items to another vessel	OR, OG - other - if vessels meet to transfer other items
	DF – dumping fish - because bad, damaged or too many
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# SPC/FFA REGIONAL OBSERVER FISH, BUNKERING and OTHER TRANSFERS LOGS (continued)

Supplementary FORM GEN - 1

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OBSERVER						VESSEL NAME	VESSEL NAME								PAGE OF 1
						NG by OBSERVER'S V	/ESSEL								
SHIP'S	TIME	OBSERVER	/ER'S VESSEL POSITION			OTH	OTHER VESSEL				RANSFER	RED (circ	le units)	ACTION	
DATE (MM/DD)	TIME		N S	LONGITUDE ( ddd° mm.mmm' )	E W	NAME	INTERNATIONAL CALLSIGN	FLAG	TYPE CODE	SKJ WGT. NO.	YFT WGT. NO.	BET WGT. NO.	. WGT. NO.	CODE host ves.	COMMENTS
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FISH TI	RANSF	FERRING, FISH	1 D	UMPING, BUNK	ER	ING by OBSERVER'S V	/ESSEL								
SHIP'S				ESSEL POSITION			ER VESSEL			FISH TE	RANSFER	RED (circ	le units)	ACTION	
DATE	TIME				Е		INTERNATIONAL	FLAG	TYPE	SKJ	YFT	BET	***************************************	CODE	COMMENTS
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# SPC / FFA REGIONAL OBSERVER SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS

FORM GEN - 2

		S OF SPE	CIAL IN IE	REST - VE	SSEL INTERA	CHONS				
First edition_D										
OBSERVER NA	AME	VESSE	L NAME		OBSERV	ER TRIP ID NUMBER	PAGE	0	F	
SSI CODE	START OF INTE	RACTION TIME	END OF INTE	RACTION TIME	DATE	LATITUI	DE		LONGITUDE	
	(HH :	mm)	(HH	: mm)	YY MM DD	(dd mm.mn	nm) N	(dd	d mm.mmm)	Ε
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	m NM	m NM		<u> </u>	m cm	m cm				
Description	n of Species	/ interaction	n							
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Description	of Species	/ Interaction	n							
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INTERACTION CODE	START	END	START	END	Adults	Juvenilles	Adu		Juvenilles	
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Decerintion	m NM	m NM	<u> </u>	<u> </u>	m cm	m cm			1	
Description	n of Species	/ interaction	n							
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VESSEL	Est. DISTAN	ICE from V.	CONDIT	ION CODE	Estimate of S	SI Length	•	То	tal Numbers	
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## SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS Instructions

First Edition Dec. 2016

The Purpose of the new <u>Vessel Interaction Form</u> is to capture any interactions by any Species of Special Interest with the <u>vessel</u> or its <u>non-primary gear</u>. An interaction with the vessel or its non-primary gear is said to have occurred if the SSI has come close to the vessel/non-primary gear or if the behaviour of the SSI has been influenced by the presence of the vessel/non-primary gear. For instance, the marine mammal came close to the vessel and swam alongside it. Record all interactions with the primary fishing gear on the PS-3, LL-4 or PL-3 form.

Non-primary gear means equipment that belongs to the vessel, but it not the gear used by the vessel to catch tuna.

On a purse-seine vessel only the net is the primary gear. FADs, tender vessels, skiff etc are not considered primary gear. All SSIs caught/trapped/entangled by the purse-seine net should be recorded on the PS-3 form.

On a longline vessel the mainline, all componets of the branchline, and the radio buoys attached to the mainline are seen as part of the primary gear. All SSI caught/trapped/ hooked by the longline gear should be recorded on the LL-4 form.

On a pole-and-line vessel only the fishing poles are part of the primary gear.

Observer Name: Print your name in full. Put your first name (Christian name) first and your last name (surname) last.

**Observer Trip ID Number:** Fill in your trip identification number as supplied by your programme before departure - exactly as recorded on the PS-1 (pg1) form.

Page of: Number forms through trip as Page 1, Page 2 etc. At the end of the trip check that the total number of pages are filled in on all pages.

**SSI Code:** Record the three-letter FAO species code for each species of special interest that interacts with the vessel/non-primary gear.

**Start of Interaction Time:** Record in hours and minutes the time the SSI started to interact with the vessel/non-primary gear. This is the time the observer first noted that there was an interaction or that the SSI behaviour was influenced by the vessel presence.

End of Interaction Time: Record the time in hours and minutes when the SSI's interaction with the vessel ended.

Date: Record the date of the interaction (year-month-day).

**Latitude / Longitude:** Record the location of the <u>start of the interaction</u> (or when the observer first noticed the interaction) by filling in the degrees, minutes and decimal minutes for latitude and longitude to three decimal places.

VESSEL INTERACTION CODES: Use these codes to describe how the SSI interacted with the vessel or non-primary gear.

IBV - Interaction, beside vessel
ION - Interaction, outside net
ICF - Interaction, crew feeding
IWF - Interaction - with FADs, but not set on
IDW - Interaction - dead in water
ICV - Collision with vessel
ICP - Collision with propeller
ICT= Collision with Tori line
FRB- Feeding on bait during set
IFO - Feeding on discarded offal

OTH - Interactions - other, please specify IRE - Resting on vessel, floats or FADs (birds)

**Estimate of Distance from Vessel:** Record an observer eye-estimate of the distance of the SSI from the vessel when the observer <u>first noticed the interaction</u>. If the SSI moves towards or away from the vessel/non-primary gear record this in the description box below. Normally the distance will be recorded in (m) **meters, or** (nm) **nautical miles.** 

### **Condition Codes:**

A0 - Alive, condition unknown A3 - Alive, but unlikely to live

A1 - Alive and healthy D - Dead
A2 -Alive, but injured or distressed U - Conditinon

**Estimate of SSI Length:** Record an observer eye-estimate of the average length of 1) the adult SSIs and 2) the juvenille SSIs. Normally, marine mammals will be recorded in (m) **meters**, while turtle, birds will be recorded as (cm) **centimeters**.

**Total Numbers:** Record the total number of adults, and or the total number of juvenille SSIs. If there are a large number of species, record an eye-estimate, and mention this is in the description area below.

**Description of Species / Interaction:** Provide more information on the species to help confirm the species (size, colour, markings) code recorded by the observer. Also, describe all aspects of the interaction as briefly, but also as informative, as possible.

# SPC / FFA REGIONAL OBSERVER SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS

FORM GEN - 2

		S OF SPE	CIAL IN IE	REST - VE	SSEL INTERA	CHONS				
First edition_D										
OBSERVER NA	AME	VESSE	L NAME		OBSERV	ER TRIP ID NUMBER	PAGE	0	F	
SSI CODE	START OF INTE	RACTION TIME	END OF INTE	RACTION TIME	DATE	LATITUI	DE		LONGITUDE	
	(HH :	mm)	(HH	: mm)	YY MM DD	(dd mm.mn	nm) N	(dd	d mm.mmm)	Ε
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VESSEL	Est. DISTAN	ICF from V.	CONDITION CODE		Estimate of S	te of SSI Length			tal Numbers	1
INTERACTION		END	START	END	Adults	Juvenilles	Adu		Juvenilles	
CODE			SIANI	END			Aut	11.5	Juvernines	·
	m NM	m NM		<u> </u>	m cm	m cm				
Description	n of Species	/ interaction	n							
SSI CODE	START OF INTE	RACTION TIME	END OF INTE	RACTION TIME	DATE	1 A T:T: '5	<b>&gt;</b> F	1	LONGITUDE	
331 CODE	(HH:			: mm)	DATE	LATITUI			LONGITUDE	
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VESSEL INTERACTION CODE	Est. DISTAN	ICE from V.	CONDIT	ION CODE	Estimate of S	SI Length		To	tal Numbers	
	START	END START END		Adults	Juvenilles	Adu	ults Juvenilles		5	
	m NM	m NM			m cm	m cm				
Description	of Species	/ Interaction	n							
SSI CODE	START OF INTE	RACTION TIME	END OF INTE	RACTION TIME	DATE	LATITUI	DE		LONGITUDE	
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VESSEL	Est. DISTAN	ICE from V.	CONDIT	ION CODE	Estimate of 9	I Estimate of SSI Length			tal Numbers	1
INTERACTION CODE	START	END	START	END	Adults	Juvenilles	Adu		Juvenilles	
			JIANI	LIND			Aut	11.3	Juverilles	<b>'</b>
Decerintion	m NM	m NM	<u> </u>	<u> </u>	m cm	m cm			1	
Description	n of Species	/ interaction	n							
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VESSEL	Est. DISTAN	ICE from V.	CONDIT	ION CODE	Estimate of S	SI Length	•	То	tal Numbers	
INTERACTION CODE	START	END	START	END	Adults	Juvenilles	Adu		Juvenilles	;
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Description	of Species		n n	I			1		ı	
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## SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS Instructions

First Edition Dec. 2016

The Purpose of the new <u>Vessel Interaction Form</u> is to capture any interactions by any Species of Special Interest with the <u>vessel</u> or its <u>non-primary gear</u>. An interaction with the vessel or its non-primary gear is said to have occurred if the SSI has come close to the vessel/non-primary gear or if the behaviour of the SSI has been influenced by the presence of the vessel/non-primary gear. For instance, the marine mammal came close to the vessel and swam alongside it. Record all interactions with the primary fishing gear on the PS-3, LL-4 or PL-3 form.

Non-primary gear means equipment that belongs to the vessel, but it not the gear used by the vessel to catch tuna.

On a purse-seine vessel only the net is the primary gear. FADs, tender vessels, skiff etc are not considered primary gear. All SSIs caught/trapped/entangled by the purse-seine net should be recorded on the PS-3 form.

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Observer Name: Print your name in full. Put your first name (Christian name) first and your last name (surname) last.

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Page of: Number forms through trip as Page 1, Page 2 etc. At the end of the trip check that the total number of pages are filled in on all pages.

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End of Interaction Time: Record the time in hours and minutes when the SSI's interaction with the vessel ended.

Date: Record the date of the interaction (year-month-day).

**Latitude / Longitude:** Record the location of the <u>start of the interaction</u> (or when the observer first noticed the interaction) by filling in the degrees, minutes and decimal minutes for latitude and longitude to three decimal places.

VESSEL INTERACTION CODES: Use these codes to describe how the SSI interacted with the vessel or non-primary gear.

IBV - Interaction, beside vessel
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ICP - Collision with propeller
ICT= Collision with Tori line
FRB- Feeding on bait during set
IFO - Feeding on discarded offal

OTH - Interactions - other, please specify IRE - Resting on vessel, floats or FADs (birds)

**Estimate of Distance from Vessel:** Record an observer eye-estimate of the distance of the SSI from the vessel when the observer <u>first noticed the interaction</u>. If the SSI moves towards or away from the vessel/non-primary gear record this in the description box below. Normally the distance will be recorded in (m) **meters, or** (nm) **nautical miles.** 

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# SPC / FFA REGIONAL OBSERVER SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS

FORM GEN - 2

		S OF SPE	CIAL IN IE	REST - VE	SSEL INTERA	CHONS				
First edition_D										
OBSERVER NA	AME	VESSE	L NAME		OBSERV	ER TRIP ID NUMBER	PAGE	0	F	
SSI CODE	START OF INTE	RACTION TIME	END OF INTE	RACTION TIME	DATE	LATITUI	DE		LONGITUDE	
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VESSEL	Est. DISTAN	ICF from V.	CONDITION CODE		Estimate of S	te of SSI Length			tal Numbers	1
INTERACTION		END	START	END	Adults	Juvenilles	Adu		Juvenilles	
CODE			SIANI	END			Aut	11.5	Juvernines	·
	m NM	m NM		<u> </u>	m cm	m cm				
Description	n of Species	/ interaction	n							
SSI CODE	START OF INTE	RACTION TIME	END OF INTE	RACTION TIME	DATE	1 A T:T: '5	<b>&gt;</b> F	1	LONGITUDE	
331 CODE	(HH:			: mm)	DATE	LATITUI			LONGITUDE	_
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VESSEL INTERACTION CODE	Est. DISTAN	ICE from V.	CONDIT	ION CODE	Estimate of S	SI Length		To	tal Numbers	
	START	END START END		Adults	Juvenilles	Adu	ults Juvenilles		5	
	m NM	m NM			m cm	m cm				
Description	of Species	/ Interaction	n							
SSI CODE	START OF INTE	RACTION TIME	END OF INTE	RACTION TIME	DATE	LATITUI	DE		LONGITUDE	
	(HH :	mm)	(HH : mm)		YY MM DD			(dd	d mm.mmm)	Е
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VESSEL	Est. DISTAN	ICE from V.	CONDIT	ION CODE	Estimate of 9	I Estimate of SSI Length			tal Numbers	1
INTERACTION CODE	START	END	START	END	Adults	Juvenilles	Adu		Juvenilles	
			JIANI	LIND			Aut	11.3	Juverilles	<b>'</b>
Decerintion	m NM	m NM	<u> </u>	<u> </u>	m cm	m cm			1	
Description	n of Species	/ interaction	n							
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SSI CODE	START OF INTE (HH:			RACTION TIME : mm)	DATE	LATITU			LONGITUDE	
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VESSEL	Est. DISTAN	ICE from V.	CONDIT	ION CODE	Estimate of S	SI Length	•	То	tal Numbers	
INTERACTION CODE	START	END	START	END	Adults	Juvenilles	Adu		Juvenilles	;
3052	m NM	m NM			m cm	m cm				
Description	of Species		n n	I			1		ı	
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## SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS Instructions

First Edition Dec. 2016

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# SPC / FFA REGIONAL OBSERVER SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS

FORM GEN - 2

		S OF SPE	CIAL IN IE	REST - VE	SSEL INTERA	CHONS				
First edition_D										
OBSERVER NA	AME	VESSE	L NAME		OBSERV	ER TRIP ID NUMBER	PAGE	0	F	
SSI CODE	START OF INTE	RACTION TIME	END OF INTE	RACTION TIME	DATE	LATITUI	DE		LONGITUDE	
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VESSEL	Est. DISTAN	ICF from V.	CONDITION CODE		Estimate of S	te of SSI Length			tal Numbers	1
INTERACTION		END	START	END	Adults	Juvenilles	Adu		Juvenilles	
CODE			SIANI	END			Aut	11.5	Juvernines	·
	m NM	m NM		<u> </u>	m cm	m cm				
Description	n of Species	/ interaction	n							
SSI CODE	START OF INTE	RACTION TIME	END OF INTE	RACTION TIME	DATE	1 A T:T: '5	<b>&gt;</b> F	1	LONGITUDE	
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VESSEL INTERACTION CODE	Est. DISTAN	ICE from V.	CONDIT	ION CODE	Estimate of S	SI Length		To	tal Numbers	
	START	END START END		Adults	Juvenilles	Adu	ults Juvenilles		5	
	m NM	m NM			m cm	m cm				
Description	of Species	/ Interaction	n							
SSI CODE	START OF INTE	RACTION TIME	END OF INTE	RACTION TIME	DATE	LATITUI	DE		LONGITUDE	
	(HH :	mm)	(HH : mm)		YY MM DD			(dd	d mm.mmm)	Ε
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VESSEL	Est. DISTAN	ICE from V.	CONDIT	ION CODE	Estimate of 9	I Estimate of SSI Length			tal Numbers	1
INTERACTION CODE	START	END	START	END	Adults	Juvenilles	Adu		Juvenilles	
			JIANI	LIND			Aut	11.3	Juverilles	<b>'</b>
Decerintion	m NM	m NM	<u> </u>	<u> </u>	m cm	m cm			1	
Description	n of Species	/ interaction	n							
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SSI CODE	START OF INTE (HH:			RACTION TIME : mm)	DATE	LATITU			LONGITUDE	,
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VESSEL	Est. DISTAN	ICE from V.	CONDIT	ION CODE	Estimate of S	SI Length	•	То	tal Numbers	
INTERACTION CODE	START	END	START	END	Adults	Juvenilles	Adu		Juvenilles	;
3052	m NM	m NM			m cm	m cm				
Description	of Species		n n	I			1		ı	
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## SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS Instructions

First Edition Dec. 2016

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#### Supplement to **SPECIES OF SPECIAL INTEREST - SIGHTINGS** FORM GEN - 2 First Edition DEC. 2016 OBSERVER NAME VESSEL NAME OBSERVER TRIP ID No. PAGE OF TOTAL NUMBER SIGHTING CODE **LATITUDE LONGITUDE TALLY** DATE YY MM DD (dd mm.mmm) Ν (ddd mm.mmm) Ε W SSI CODE Species Description TOTAL NUMBER **LATITUDE LONGITUDE** SIGHTING CODE **TALLY** DATE YY MM DD (ddd mm.mmm) (dd mm.mmm) Ν Ε SSI CODE Species Description TOTAL NUMBER SIGHTING CODE **LATITUDE LONGITUDE TALLY** DATE YY MM DD (dd mm.mmm) Ν (ddd mm.mmm) Ε S W SSI CODE Species Description SIGHTING CODE TOTAL NUMBER **LATITUDE LONGITUDE TALLY** DATE YY MM DD (dd mm.mmm) Ν (ddd mm.mmm) Ε W Species Description SPECIES CODE TOTAL NUMBER SIGHTING CODE LATITUDE LONGITUDE **TALLY** DATE YY MM DD Ε (dd mm.mmm) Ν (ddd mm.mmm) W SSI CODE Species Description TOTAL NUMBER LATITUDE LONGITUDE SIGHTING CODE TALLY DATE YY MM DD (ddd mm.mmm) (dd mm.mmm) Ν Ε W SSI CODE Species Description TOTAL NUMBER **LATITUDE LONGITUDE** SIGHTING CODE **TALLY** DATE YY MM DD Ε (dd mm.mmm) Ν (ddd mm.mmm) W SSI CODE Species Description

SPC / FFA REGIONAL OBSERVER

## SPECIES OF SPECIAL INTEREST - Supplementary (SIGHTINGS) Instructions

First Edition Dec. 2016

The purpose of the newly formated Species of Special Interest - Supplementary (Sightings) Form is to capture any sightings of Species of Special Interest made by the observer. Make sure that it is a sighting and not an interaction with the vessel or non-primary gear (see GEN-2 interactions). Recording a sighting of a SSI suggests that the SSI's behaviour was not affected by the presence of the observer's vessel. Be reflective about how you record birds. Obviously, recording every single bird you see over-head with the species group code (BIZ) is not helpful. So think about what is helpful before recording bird sightings. Record (if you can identify them), the species you generally see during your trip. Your data should indicate the general abundance of birds, by species during the trip. Further training in Bird Identification and data recording will be provided from mid-2017. Recording the presence of marine mammals and birds on their migatory routes can be helpful to define, understand and evaluate their species ranges (the areas they can be found) and any impacts changes in the ecosystem is having on their migatory routes.

Observer Name: Print your name in full. Put your first name (Christian name) first and your last name (Surname) last.

Observer Trip ID Number: Fill in your trip identification number as supplied by your programme before departure exactly as recorded on the PS-1 (pg1) form.

Page of: Number Forms through trip as Page 1, Page 2 etc. At the end of the trip check that the total number of pages are filled in on all pages.

**DATE:** Record the date (year-month-day) the sighting was made.

**LONGITUDE** LATITUDE:

Give the position of the observer's vessel when the first SSI was sighted.

**SIGHTING CODE:** Record one of the 'Sighting Codes' to indicate the SSI behaviour when sighted.

## SIGHTING CODES

SDS - Sighting- Distance Swimming

SBR - Sighting - Breaching

STP - Sighting - Tail Slapping or Playing

SMG - Sighting - Motionless in Group

SDW - Sighting -Dead in Water

SBO - Sighting - Bird Overhead

OTH - Other, please specify

Use this area if there are a number of SSIs that are noticed during the day. This area will be useful for bird sightings, or pods of marine mammal with many individuals.

**TOTAL NUMBER:** 

Record the total number of the SSI species that were seen. If there are large numbers of individual species record an eye-estimate.

SSI CODE Record the three letter FAO species identification code,

**SPECIES DESCRIPTION:**  Provide a description of the species that will help to confirm its species code, mention colour, markings, length, fin shape etc.

#### Supplement to **SPECIES OF SPECIAL INTEREST - SIGHTINGS** FORM GEN - 2 First Edition DEC. 2016 OBSERVER NAME VESSEL NAME OBSERVER TRIP ID No. PAGE OF TOTAL NUMBER SIGHTING CODE **LATITUDE LONGITUDE TALLY** DATE YY MM DD (dd mm.mmm) Ν (ddd mm.mmm) Ε W SSI CODE Species Description TOTAL NUMBER **LATITUDE LONGITUDE** SIGHTING CODE **TALLY** DATE YY MM DD (ddd mm.mmm) (dd mm.mmm) Ν Ε SSI CODE Species Description TOTAL NUMBER SIGHTING CODE **LATITUDE LONGITUDE TALLY** DATE YY MM DD (dd mm.mmm) Ν (ddd mm.mmm) Ε S W SSI CODE Species Description SIGHTING CODE TOTAL NUMBER **LATITUDE LONGITUDE TALLY** DATE YY MM DD (dd mm.mmm) Ν (ddd mm.mmm) Ε W Species Description SPECIES CODE TOTAL NUMBER SIGHTING CODE LATITUDE LONGITUDE **TALLY** DATE YY MM DD Ε (dd mm.mmm) Ν (ddd mm.mmm) W SSI CODE Species Description TOTAL NUMBER LATITUDE LONGITUDE SIGHTING CODE TALLY DATE YY MM DD (ddd mm.mmm) (dd mm.mmm) Ν Ε W SSI CODE Species Description TOTAL NUMBER **LATITUDE LONGITUDE** SIGHTING CODE **TALLY** DATE YY MM DD Ε (dd mm.mmm) Ν (ddd mm.mmm) W SSI CODE Species Description

SPC / FFA REGIONAL OBSERVER

## SPECIES OF SPECIAL INTEREST - Supplementary (SIGHTINGS) Instructions

First Edition Dec. 2016

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**DATE:** Record the date (year-month-day) the sighting was made.

**LONGITUDE** LATITUDE:

Give the position of the observer's vessel when the first SSI was sighted.

**SIGHTING CODE:** Record one of the 'Sighting Codes' to indicate the SSI behaviour when sighted.

## SIGHTING CODES

SDS - Sighting- Distance Swimming

SBR - Sighting - Breaching

STP - Sighting - Tail Slapping or Playing

SMG - Sighting - Motionless in Group

SDW - Sighting -Dead in Water

SBO - Sighting - Bird Overhead

OTH - Other, please specify

Use this area if there are a number of SSIs that are noticed during the day. This area will be useful for bird sightings, or pods of marine mammal with many individuals.

**TOTAL NUMBER:** 

Record the total number of the SSI species that were seen. If there are large numbers of individual species record an eye-estimate.

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**SPECIES DESCRIPTION:**  Provide a description of the species that will help to confirm its species code, mention colour, markings, length, fin shape etc.

#### Supplement to **SPECIES OF SPECIAL INTEREST - SIGHTINGS** FORM GEN - 2 First Edition DEC. 2016 OBSERVER NAME VESSEL NAME OBSERVER TRIP ID No. PAGE OF TOTAL NUMBER SIGHTING CODE **LATITUDE LONGITUDE TALLY** DATE YY MM DD (dd mm.mmm) Ν (ddd mm.mmm) Ε W SSI CODE Species Description TOTAL NUMBER **LATITUDE LONGITUDE** SIGHTING CODE **TALLY** DATE YY MM DD (ddd mm.mmm) (dd mm.mmm) Ν Ε SSI CODE Species Description TOTAL NUMBER SIGHTING CODE **LATITUDE LONGITUDE TALLY** DATE YY MM DD (dd mm.mmm) Ν (ddd mm.mmm) Ε S W SSI CODE Species Description SIGHTING CODE TOTAL NUMBER **LATITUDE LONGITUDE TALLY** DATE YY MM DD (dd mm.mmm) Ν (ddd mm.mmm) Ε W Species Description SPECIES CODE TOTAL NUMBER SIGHTING CODE LATITUDE LONGITUDE **TALLY** DATE YY MM DD Ε (dd mm.mmm) Ν (ddd mm.mmm) W SSI CODE Species Description TOTAL NUMBER LATITUDE LONGITUDE SIGHTING CODE TALLY DATE YY MM DD (ddd mm.mmm) (dd mm.mmm) Ν Ε W SSI CODE Species Description TOTAL NUMBER **LATITUDE LONGITUDE** SIGHTING CODE **TALLY** DATE YY MM DD Ε (dd mm.mmm) Ν (ddd mm.mmm) W SSI CODE Species Description

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OBSER			C/FFA REGION					FOR			1 - 3		
PROGR.		VESSI	EL TRIP MONI	TORING	SUMMA	ARY			(pg				
REV. DE			This form		ha filla a	l :	TRIP STAR	T DATE	YY	ММ	DD		
Observer i	NAME		This form by the ob	TRIP END D	ATE	YY	ММ	DD					
Obs. NA	TIONALIT	Y TRIP ID NUMBER	COASTAL STATE LICENC	ES (IF ANY)				TY OF BOARD			IF		
VESSEL NAME			COUNTRY REG.#	UVI		IRCS		VESSEL FLAG			EL GEAR YPE		
Die	d the v	ressel do any of the followir	ng (indicate 'Yes'	or 'No' witl	h an 'X'	for every	item)	V		NI.			
<u>a</u>		Did the energia are any every		twist regist	dalas raf	ivoo boordi	in a to	_Yes		No	pg		
social	RS <b>-a</b>	Did the operator or any crew m intimidate or interfere with obs			-	use boardi	ng to,	RS	-a		No.		
our	кѕ <b>-b</b>	Request that an event not be re	eported by the obse	erver		instruction		RS	-b				
er rights behaviour	RS -C	Mistreat other crew				full wordin ns on this p	~	RS	-с				
Observer rights / behaviour		Did operator fail to provide obs						RS	-d				
Ser	кѕ <b>-d</b>	observer's Government, with for facilities of reasonable standar		L									
ō		onboard the vessel	a oquivalent to the	.so nonnany	available	, to arr onlo							
	NR -a	Fish in areas where the vessel	is not permitted to f	ïsh				NR	-a				
ons	NR <b>-b</b>	Target species other than those	e they are licenced	to target				NR	-b				
latic	NR <b>-C</b>	Use a fishing method other that	n the method the ve	essel was de	signed or	licensed		NR	-с				
ngə	ик <b>-d</b>	Not display or present a valid (			_			NR.	-d	╛			
ıal r	NR -e	Transfer or transship fish from	-		$\vdash$	-е	$\exists$						
National regulations	NR -f	Was involved in bunkering act						$\vdash$	-f	$\dashv$			
ž	NR <b>-g</b>	Fail to stow fishing gear when e		e vessel is n	ot authori	sed to fish		H	-g	$\dashv$			
	WK -9	Tan to stow norming year when t	Thering areas wher		Ot dati ion	300 10 11311			9	븍	<u> </u>		
ည္	wc <b>-a</b>	Fail to comply with any Comm	ission Conservation	and Manag	ement Me	easures (Cl	MMs)	wc	-а				
WCPFC CMMs	wc <b>-b</b>	High-grade the catch											
<b>S</b> •	wc <b>-c</b>	-c Fish on FAD during FAD Closure											
	LP <b>-a</b>	Inaccurately record vessel pos	ition on vessel log s	sheets for se	ts, hauling	g and catch	1	LP	-a				
ion	∟Р <b>-b</b>	Fail to report vessel positions to	o countries, where red	quired when en	tering and	d leaving a	n EEZ	LP	-b				
Logsheet recording - Position Logsheet recording - Catch	LP <b>-10</b>	(crossing to or from an EEZ into o	r out of the High Seas	;)									
- ნი - ნი	LС <b>-а</b>	Inaccurately record retained 'T	arget Species" in th	get Species" in the Vessel logs [or weekly reports]									
rdir rdir	LС <b>-b</b>	Inaccurately record 'Target Sp	ecies" Discards	LC	-b								
ooe.	LC <b>-C</b>	Record target species inaccura	ately [eg. combine b	oigeye/yellov	LC	-с							
eet	LC <b>-d</b>	Not record bycatch discards			LC	-d							
Logsheet recording Logsheet recording	<i>L</i> с <b>-е</b>	Inaccurately record retained by	ycatch Species		LC	-е							
១១	LС <b>-f</b>	Inaccurately record discarded	bycatch species					LC	-f				
SSIs	sı <b>-a</b>	Land on deck Species of Spec	ial Interest (SSI			nmals, turt		sı	-а				
Š	sı <b>-b</b>	Interact (not land) with SSIs		seabird	ls or prote	cted shark	s)	sı	-b				
	ри <b>-а</b>	Dispose of any metals, plastics	s, chemicals or old f	ïshing gear				PN	-a				
ر و	ри <b>-b</b>	Discharge any oil											
Pollution	PN <b>-C</b>	Lose any fishing gear						PN	-с				
Pol	ри <b>-d</b>	Abandon any fishing gear											
	<sub>Р</sub> -е	Fail to report any abandoned g											
								PN	I.	<u> </u>			
Sea safety	ss <b>-a</b>	Fail to monitor international sa						ss	-a	_			
Sa	ss <b>-b</b>	Carry out-of-date safety equipr	ment					ss	-b				

If unsure that a violation has been committed but suspect a vessel has violated its license agreement place an 'X' in the 'YES' box. Then wrie a full account of the incident, including a all evidence that aroused suspicion.

OBSERVER PROGAMME The observer programme/provider you are contracted to (employed by) for this trip.

OBSERVER NAME Tas written in your passport. Observer must print first name first and last name (family name) last.

OBSERVER NATIONALITY YOUR nationality as per the passport you are using.

OBSERVER TRIP ID No.

(if any)

Observer trip identification number. Same number for all forms and issued before leaving port. COASTAL STATE LICENCE List the licence number(s) of any current licence issued by a Coastal States (i.e countries where the vessel is licensed to

NATIONALITY OF BOARING VESSEL IF **BOARDED AT SEA** 

VESSEL NAME

**National regulations** 

**WCPFC CMMs** 

If host vessel is boarded by authorities and inspected at sea, what was nationality of the authority?

Full vessel name, as written on licence documentation - not abbreviated. Include all numbers.

COUNTRY REGISTRATION # The country registration number that was issued by the country where the vessel is registered. WCPFC requires all vessels over 100 Gross Tonnage to have a UVI after 1st Jan 2016. The number may appear

UNIQUE VESSEL IDENTIFIER on certificates before 2016. Generally the UVI is the International Marine Organistion number or may be the the Lloyd's Register (LR) no.

> International Radio Call Sign is issued by the flage state, normally painted on the side of the boat and a mix of letters and numbers. The IRCS should be the main number on the hull or side of the vessel. Confirm this before

INTERNATIONAL RADIO CALL SIGN (IRCS) recording it. It may also be found on the vessel's licence.

VESSEL FLAG Record the flag of the vessel. This is the same as the country the vessel is registered in. The fishing method vessel is licensed to use (i.e purse seine, longline, pole-and-line) VESSEL GEAR TYPE

If unsure that a violation has been committed but suspect a vessel has violated its license agreement, place an 'X' in the 'Yes' box. Then write a full account of the incident, including all evidence that aroused suspicion.

#### During the trip did the Master or crew of the vessel attempt or do any of the following:

/social behaviour	RS-a	Did the operator or any crew member assault, obstruct, resist, delay, refuse boarding to, intimidate or interfere with observers in the performance of their duties  Were you prevented, blocked, intimidated, harassed or threatened by any of the crew or operator while onboard? Did any crew member attempt to bias your work through a gift or bribe?										
ocial b	RS-b	Request that an event not be reported by the observer  Did any crew member or operator ask you not to record, report photograph or video an event?										
ıts / sc	RS-c	Mistreat other crew										
rights	1.00	Were there any clear systematic or prejudiced bullying or mistreatment of any crew ?										
Observer	RS-d	Did the operator fail to provide the observer , while on board the vessel, at no expense to the observer or the observers Government, with food, accommodation [access to safety gear] and medical facilities of a reasonable standard equivalent to those normally available to an officer on board the vessel										
		Do you think you were purposely given poor accommodation, food, no access to safety gear or medical treatment?										

#### Fish in areas where the vessel is not permitted to fish

Be aware of areas within EEZs that a vessel is not allowed to fish. These include closed 'high seas pockets for purseseiners', internal waters, territorial seas (12 miles from a land and archipelagic waters baseline) that are off limits to most gear types (however some exceptions do occur).

#### Target species other than those they are licensed to target

The target species is mentioned on the vessel's fishing permit. Usually "Tuna" will be the target species. Most common species targeted illegally are sharks or reef species targeted with handlines.

# Use a fishing method other than the method the vessel was designed or licensed

The licensed fishing method is on the vessel's fishing permit. Note if a fishing method other than that on the permit is used. Common violations are hand lining near reefs and purse seiners setting lines at night to catch sharks. Fully describe the type of gear used and what species, if any, were caught.

#### Not display or present a valid (and current) licence document onboard

A valid original licence document should be in the wheelhouse on display. Regulations usually require an official license document to be kept onboard ready for inspection on request by suitable people, including observers. Record 'YES' if: no document; a copy or faxed document; an outdated document; or a cover letter shown. Report which type and

# Transfer or tranship fish from or to another vessel.

NR-e Transhipping of fish by purse seiners can only occur in designated ports. Indicate if host vessel transhipped fish or any fish products (e.g. shark fins) at sea. Note: group seine operations in PNG may tranship at sea in their zone

### Was involved in bunkering activities

NR-f Bunkering is transfer of fuel between vessels. Generally a bunker vessel is a specialised fuel carrier. Some countries ban bunkering except at port, while others require notification prior to bunkering.

### Fail to stow fishing gear when entering areas where vessel is not authorised to fish

NR-q Fishing gear should be stowed when entering waters of areas where vessels are not authorised to fish E.g.: net covered, boom lowered on purse seiners; floats stored and covered and snoods stored on longliners

#### Fail to comply with any Commission Conservation and Management measures (CMMs) WC-a

Has any WCPFC regional regulation (CMM) been breached?

#### High grade the catch

WC-b Did the vessel discard target species already on board to make room for better quality, larger size or for a more marketable target species

#### Fish on FAD during FAD Closure

During the period July 1- October 31: Did the vessel retrieve, service, set or fish on any floating object or group of objects, WC-c of any size, that was or was not deployed, living or non-living, including (but not only) buoys, floats, netting, webbing, plastics, bamboo, logs or whale sharks, floating on or near the surface of the water that fish may associate with? Was vessel used to aggregate fish or to move aggregated fish, including using underwater lights or chumming.

# SPC/FFA REGIONAL OBSERVER VESSEL TRIP MONITORING SUMMARY

FORM GEN - 3

(pg 2)

						" o ,
REV. DEC 2016						
OBSERVER NAME			VESSELNAME		OBSERVER NATIONALITY	
TRIP ID NUMBER			OBSERVER PROGRAMME			
	IF YOU ANSWERE	ED YES TO ANY IT	TEM ON THE GEN-3 FORM	II PLEASE EXPLAIN BRIEF	LY IN THE AREA BELO	OW.
	A FULL EXPL	ANATION MUST	BE WRITTEN IN THE OBS	SERVER DAILY JOURNAL A	AND/OR TRIP REPORT	•
JOURNAL	PAGE NUMBERS F	OR THE EXPLANA	ATION SHOULD BE RECO	RDED IN THE BOXES PROV	VIDED ON THE FRONT	OF THIS FORM
<del></del>					<del></del>	
	DEBRE	IFING STATUS	,	OBSERVER SIGNATURE	DATE	YY/MM/DD
Circle one:	Not Dehriefed	Dro-dobriofod	Debriefed			

Rev.	DEC 2	2016
sition	LP-a	Inaccurately record vessel position on vessel log sheets for sets, hauling and catch The vessel logsheet should be filled out by the Captain or a designated officer, daily, or after each set. The observer has the right to ask to see this log (inspect this log at least once a day). If there are significant discrepancies (>3nm) of reported set positions between the vessel log and the observer forms the details should be written into the observer report.
Logsheet recording - Position	LP-b	Fail to report vessel positions to countries, where required when entering and leaving an EEZ (crossing to or from an EEZ into or out of the High Seas)  Zone Entry and Zone Exit as well as Port Entry and Port Exit notifications are regulated by countries.  Most countries also have mandatory Wednesday reporting of position when fishing in their EEZs.
	LC-a	Inaccurately record retained 'Target Species" in the Vessel logs or weekly reports Is the vessel under reporting, over reporting or not reporting any of the observed sets for any reason? It is critical that observers do their own accurate estimate of catch. Compare vessel logged catches with your estimates to ensure all sets are recorded and the catch has been logged correctly every day.
Logsheet Recording – Catch	LC-b	Inaccurately record 'Target Species" Discards Report any attempt to not report commercial species that have been rejected because they are damaged, too small or are considered to be undesirable for other reasons. Note in your report if discards were reported by vessel.
neet Record	LC-c	Record target species inaccurately  On purse seiners BET are commonly recorded as YFT; and both BET and YFT are sometimes recorded as SKJ.  Mixed small BET and YFT are often recorded as just YFT, simply because they fetch the same cannery price.
Logs	LC-d	Not record bycatch discards Report any attempt to not report any fish, shark, reptile or mammal species - retained or discarded.
	LC-e	Inaccurately record retained bycatch species Report if vessel wrongly reports retained bycatch species.
	LC-f	Inaccurately record discarded bycatch species Report if vessel wrongly reports discarded bycatch species.
		Land on deck Species of Special Interest (SSIs)  Did the vessel land on deck at any time (either deliberately or accidentally) during the trip any SSIs.

SSIs are: all turtles; all marine mammals – dolphins, whales, seals, dugongs, etc; birds; oceanic whitetip sharks and silky sharks and whale sharks.

All landings should also be fully recorded on the catch details forms (PS-3, PL-3, LL-4).

More complete data and description must be in GEN-2 forms, the observer's journal and written report It is important to note the vessel's general attitude to such animals in reports.

Interact (not land) with SSIs (e.g. Marine mammals, turtle or whale sharks)

SSIs

SI-b Did any SSIs interact with any part of the vessel, its gear, or its support boats, etc., during the trip? More information on interactions must be recorded on GEN-2 forms, observer journal and written report.

		Dispose of any metals, plastics, chemicals or old fishing gear									
<b>Pollution</b> explanation on GEN-6)	PN-a	Was there any deliberate throwing over of: metals or plastics (from kitchen or elsewhere on boat); or parts of the fishing gear (netting, nylon line, etc.); from the vessel into the ocean at any time?  Was any unprocessed perishable garbage discharged within 12 nautical miles of land or a reef?									
no nc	PN-b	Discharge any oil									
<b>Pollution</b> . explanatic	PN-D	Was any fuel oil spilled or dumped within 50 nautical miles of shore?									
Pollt expl	PN-c	Lose any fishing gear									
1 100	FN-C	Was any fishing gear lost during this trip?									
see MARPOL	PN-d	Abandon any fishing gear									
(see	riv-u	Was any fishing gear dumped or abandoned by the observer's host vessel?									
•	PN-e	Fail to report any abandoned gear									
	1 11-C	Did vessel not report any lost fishing gear (IF REQUIRED by the country in which waters it is fishing)?									

		Fail to monitor international Safety frequencies									
a safety	SS-a	Does the vessel keep its radio tuned into and turned onto the international distress, safety and calling frequencies when it is not communicating?  Frequencies are:  VHF marine radio for medium to long range voise communications - 2182 kHz  VHF marine radio for short range voice communications - Channel 16									
Š	SS-b	Carry out-of-date safety equipment  Was any of the safety equipment (lifeboats, EPIRBs, etc.) out of survey date or in a bad condition?									

OBSER			SPC	/FFA REGION	NAL OBS	ERVER			FO	RM	GEN	- 3
PROGR	AMME:		VESSE	L TRIP MONI	TORING S	SUMMA	ARY			(pg	g 1)	
REV. DE				TI :- (	4 1	- C'11-		TRIPSTART	DATE	YY	ММ	DD
Observer I	NAME			This form	TRIP END DA	ATE	YY	ММ	DD			
Obs. NA	TIONALITY	TRIP ID NUMBER		by the ob		revery	uip	NATIONALIT	Y OF BOA	RDING \	VESSEL IF	=
-					( ,			BOARDED				
VECCEI				COUNTRY REG.#	UVI		IRCS	<u> </u>	VESSEL		VESSE	
VESSEL NAME								FLAG			TY	PE
Die	d the v	essel do any of	the following	g (indicate 'Yes'	or 'No' with	n an 'X' f	or every	item)	Vaa		NI.	
<u>a</u>		Did the energter	or any arow ma	ambor assault obe	atruot ragint	dolov, rofe	usa haardi	ing to	_Yes		No	pg
Observer rights / social behaviour	RS <b>-a</b>		-	ember assault, obs rvers in the perforr		-	use Doardi	ng w,		≀s <b>-a</b>		No.
s/s	кѕ <b>-b</b>	Poguest that an	ovent not be re	ported by the obse	on/or	Refer to	instruction	nages	$\vdash$	rs <b>-b</b>		
rer rights pehaviour		Mistreat other cre	•	boned by the obse	51 V G1	for the	full wordin	gof				
er r	RS <b>-C</b>			rver, while onboar	d. at no expe		•		$\vdash$	≀s <b>-C</b>		
serv	rs <b>-d</b>	observer's Gove	F	rs <b>-d</b>								
ο̈́		facilities of reaso		l - equivalent to the	ose normally	available	to an offic	er				
	NR <b>-a</b>			s not permitted to t	ish				Ι Ι.	ır <b>-a</b>		
us									H			
National regulations	NR -b			they are licenced	_	oiar a d -	lioons = -!		H	IR <b>-b</b>		
ang	NR -C	_		the method the ve		_	licerisea		$\vdash$	IR <b>-C</b>		-
al re	NR <b>-d</b>			nd current) licence		onboard			H	ır <b>-d</b>		
ion	NR -e	Transfer or trans	Н	IR -e								
Nat	NR <b>-f</b>	Was involved in	<b>⊢</b> ⊢′	vr <b>-f</b>								
	NR <b>-g</b>	Fail to stow fishir	^	IR <b>-g</b>								
ပ္ပ	wc <b>-a</b>	Fail to comply wi	ith any Commis	sion Conservation	and Manage	ement Me	asures (Cl	MMs)	и	vс <b>-а</b>		
WCPFC CMMs	wc <b>-b</b>	High-grade the d	catch						и	vc <b>-b</b>		
≥ 0	wc <b>-c</b>	Fish on FAD dur	ing FAD Closur	е					и	vc <b>-c</b>		
	LP <b>-a</b>	Inaccurately reco	ord vessel nosit	ion on vessel log s	sheets for set	ts haulind	and catch	)	П,	.р <b>-а</b>		
e o			·	countries, where re		_			$\vdash$	.p <b>-b</b>		
Logsheet recording - Position Logsheet recording - Catch	LP <b>-b</b>	•	•	out of the High Seas	•	torring arre						
9-P	LС <b>-а</b>	Inaccurately reco	ord retained 'Ta	rget Species" in th	ne Vessel log	s [or wee	kly reports	]	I.	.с <b>-а</b>		
ding	ьс <b>-b</b>	Inaccurately rece	ord 'Target Spe	cies" Discards		1	.c <b>-b</b>					
Scor	LC <b>-C</b>	Record target sp	ecies inaccurat	ely [eg. combine b	oigeye/yellov			_c <b>-c</b>				
et re	LC <b>-d</b>	Not record bycat	tch discards							.c <b>-d</b>		
she	.с <b>-е</b>	Inaccurately reco	ord retained by	catch Species						.с <b>-е</b>		
Log	LC <b>-f</b>	Inaccurately rece	-	•						LC <b>-f</b>		
40		Lond	naning of Court	1 Into v==1 (00)	,				${\Box}$			
SSIs	sı <b>-a</b>	Land on deck Sp		al Interest (SSI			nmals, turt cted shark		$\vdash$	sı <b>-a</b>		
	sı <b>-b</b>	Interact (not land	a) with SSIs			7.0.0		,		sı <b>-b</b>		
	ри <b>-а</b>	Dispose of any n	netals, plastics,	chemicals or old t	ishing gear					» -a		
uo	РN <b>-b</b>	Discharge any o	il						F	ъ <b>-b</b>		
Pollution	PN <b>-C</b>	Lose any fishing	gear						F	∘N -C		
Po	ри <b>-d</b>	Abandon any fis	hing gear							» - <b>d</b>		
	<i>Р</i> - <b>е</b>	Fail to report any		ear					F	·и -е		
>	05 5	Foil to manitari	ntornational a-f	oty froguencies								
Sea safety	ss -a	Fail to monitor in							$\vdash$	ss -a		
ÿ	ss <b>-b</b>	Carry out-of-date	e satety equipm	ent						ss <b>-b</b>		

If unsure that a violation has been committed but suspect a vessel has violated its license agreement place an 'X in the 'YES' box. Then wrie a full account of the incident, including a all evidence that aroused suspicion.

**OBSERVER PROGAMME** The observer programme/provider you are contracted to (employed by) for this trip.

OBSERVER NAME Tas written in your passport. Observer must print first name first and last name (family name) last.

**OBSERVER NATIONALITY** YOUR nationality as per the passport you are using.

OBSERVER TRIP ID No.

NATIONALITY OF

**NCPFC CMN** 

marketable target species Fish on FAD during FAD Closure

Observer trip identification number. Same number for all forms and issued before leaving port.

COASTAL STATE LICENCE List the licence number(s) of any current licence issued by a Coastal States (i.e countries where the vessel is licensed to

fish).

If host vessel is boarded by authorities and inspected at sea, what was nationality of the authority? **BOARDED AT SEA** 

VESSEL NAME Full vessel name, as written on licence documentation - not abbreviated, Include all numbers.

COUNTRY REGISTRATION # The country registration number that was issued by the country where the vessel is registered. WCPFC requires all vessels over 100 Gross Tonnage to have a UVI after 1st Jan 2016. The number may appear

UNIQUE VESSEL IDENTIFIER on certificates before 2016. Generally the UVI is the International Marine Organistion number or may be the the

Lloyd's Register (LR) no.

International Radio Call Sign is issued by the flage state, normally painted on the side of the boat and a mix of letters and numbers. The IRCS should be the main number on the hull or side of the vessel. Confirm this before INTERNATIONAL RADIO CALL SIGN (IRCS) recording it. It may also be found on the vessel's licence.

VESSEL FLAG Record the flag of the vessel. This is the same as the country the vessel is registered in. VESSEL GEAR TYPE The fishing method vessel is licensed to use (i.e purse seine, longline, pole-and-line)

If unsure that a violation has been committed but suspect a vessel has violated its license agreement, place an 'X' in the 'Yes' box. Then write a full account of the incident, including all evidence that aroused suspicion.

# During the trip did the Master or crew of the vessel attempt or do any of the following:

haviour	RS-a	Did the operator or any crew member assault, obstruct, resist, delay, refuse boarding to, intimidate or interfere with observers in the performance of their duties  Were you prevented, blocked, intimidated, harassed or threatened by any of the crew or operator while onboard? Did any crew member attempt to bias your work through a gift or bribe?							
þ		· · · · · · · · · · · · · · · · · · ·							
<u>.</u>	RS-b	Request that an event not be reported by the observer							
200	100	Did any crew member or operator ask you not to record, report photograph or video an event?							
S		Mistreat other crew							
ight	RS-c	Were there any clear systematic or prejudiced bullying or mistreatment of any crew?							
Observer rights / social behaviour	RS-d	Did the operator fail to provide the observer, while on board the vessel, at no expense to the observer or the observers Government, with food, accommodation [access to safety gear] and medical facilities of a reasonable standard equivalent to those normally available to an officer on board the vessel							
		Do you think you were purposely given poor accommodation, food, no access to safety gear or medical treatment?							
	NR-a	Fish in areas where the vessel is not permitted to fish  Be aware of areas within EEZs that a vessel is not allowed to fish. These include closed 'high seas pockets for purse-seiners', internal waters, territorial seas (12 miles from a land and archipelagic waters baseline) that are off limits to most gear types (however some exceptions do occur).							
	NR-b	Target species other than those they are licensed to target  The target species is mentioned on the vessel's fishing permit. Usually "Tuna" will be the target species. Most common species targeted illegally are sharks or reef species targeted with handlines.							
gulations	NR-c	Use a fishing method other than the method the vessel was designed or licensed  The licensed fishing method is on the vessel's fishing permit. Note if a fishing method other than that on the permit is used. Common violations are hand lining near reefs and purse seiners setting lines at night to catch sharks. Fully describe the type of gear used and what species, if any, were caught.							
National regulations	NR-d	Not display or present a valid (and current) licence document onboard  A valid original licence document should be in the wheelhouse on display. Regulations usually require an official license document to be kept onboard ready for inspection on request by suitable people, including observers. Record 'YES' if: no document; a copy or faxed document; an outdated document; or a cover letter shown. Report which type and							
	NR-e	Transfer or tranship fish from or to another vessel.  Transhipping of fish by purse seiners can only occur in designated ports. Indicate if host vessel transhipped fish or any fish products (e.g. shark fins) at sea. Note: group seine operations in PNG may tranship at sea in their zone							
	NR-f	Was involved in bunkering activities  Bunkering is transfer of fuel between vessels. Generally a bunker vessel is a specialised fuel carrier.  Some countries ban bunkering except at port, while others require notification prior to bunkering.							
	NR-g	Fail to stow fishing gear when entering areas where vessel is not authorised to fish Fishing gear should be stowed when entering waters of areas where vessels are not authorised to fish E.g.: net covered, boom lowered on purse seiners; floats stored and covered and snoods stored on longliners							
	WC-a	Fail to comply with any Commission Conservation and Management measures (CMMs)							
	,, C-a	Has any WCPFC regional regulation (CMM) been breached ?							
တ		High grade the catch							

WC-b Did the vessel discard target species already on board to make room for better quality, larger size or for a more

WC-c of any size, that was or was not deployed, living or non-living, including (but not only) buoys, floats, netting, webbing, plastics, bamboo, logs or whale sharks, floating on or near the surface of the water that fish may associate with ? Was vessel used to aggregate fish or to move aggregated fish, including using underwater lights or chumming.

During the period July 1- October 31: Did the vessel retrieve, service, set or fish on any floating object or group of objects,

# **SPC/FFA REGIONAL OBSERVER**

FORM GEN-3

VESS	EL TRIP MONITOR	ING SUMMAR I	(pg 2)
REV. DEC 2016  OBSERVER NAME	VESSEL NAME	OBSER!	VER NATIONALITY
TRIP ID NUMBER	OBSERVER PROGRAMME		
IF YOU ANSWERED YES TO ANY	ITEM ON THE GEN-3 FORM	PI FASE EXPLAIN BRIFFLY IN	THE AREA BELOW
	T BE WRITTEN IN THE OBSI	ERVER DAILY JOURNAL AND/O	R TRIP REPORT
			_
- Control of the Cont			
DEBREIFING STATUS		OBSERVER SIGNATURE	DATE YY / MM / DD
Circle one: Not Debriefed Pre-debriefed	I Debriefed		

# **Rev. DEC 2016** Inaccurately record vessel position on vessel log sheets for sets, hauling and catch The vessel logsheet should be filled out by the Captain or a designated officer, daily, or after each set. LP-a The observer has the right to ask to see this log (inspect this log at least once a day). If there are significant discrepancies (>3nm) of reported set positions between the vessel log and the observer forms the Logsheet recording - Position details should be written into the observer report. Fail to report vessel positions to countries, where required when entering and leaving an EEZ (crossing to or from an EEZ into or out of the High Seas) LP-b Zone Entry and Zone Exit as well as Port Entry and Port Exit notifications are regulated by countries. Most countries also have mandatory Wednesday reporting of position when fishing in their EEZs. Inaccurately record retained 'Target Species" in the Vessel logs or weekly reports Is the vessel under reporting, over reporting or not reporting any of the observed sets for any reason? LC-a It is critical that observers do their own accurate estimate of catch. Compare vessel logged catches with your estimates to ensure all sets are recorded and the catch has been logged correctly every day. -ogsheet Recording - Catch Inaccurately record 'Target Species" Discards LC-b Report any attempt to not report commercial species that have been rejected because they are damaged, too small or are considered to be undesirable for other reasons. Note in your report if discards were reported by vessel. Record target species inaccurately LC-c On purse seiners BET are commonly recorded as YFT; and both BET and YFT are sometimes recorded as SKJ. Mixed small BET and YFT are often recorded as just YFT, simply because they fetch the same cannery price. Not record bycatch discards LC-d Report any attempt to not report any fish, shark, reptile or mammal species - retained or discarded. Inaccurately record retained bycatch species Report if vessel wrongly reports retained bycatch species. Inaccurately record discarded bycatch species LC-f Report if vessel wrongly reports discarded bycatch species. Land on deck Species of Special Interest (SSIs) Did the vessel land on deck at any time (either deliberately or accidentally) during the trip any SSIs. SSIs are: all turtles; all marine mammals - dolphins, whales, seals, dugongs, etc; birds; oceanic whitetip sharks and silky sharks and whale sharks. All landings should also be fully recorded on the catch details forms (PS-3, PL-3, LL-4). SSIs More complete data and description must be in GEN-2 forms, the observer's journal and written report It is important to note the vessel's general attitude to such animals in reports. Interact (not land) with SSIs (e.g. Marine mammals, turtle or whale sharks) Did any SSIs interact with any part of the vessel, its gear, or its support boats, etc., during the trip? More information on interactions must be recorded on GEN-2 forms, observer journal and written report.

		Dispose of any metals, plastics, chemicals or old fishing gear										
<b>Pollution</b> explanation on GEN-6)	PN-a	Was there any deliberate throwing over of: metals or plastics (from kitchen or elsewhere on boat); or parts of the fishing gear (netting, nylon line, etc.); from the vessel into the ocean at any time? Was any unprocessed perishable garbage discharged within 12 nautical miles of land or a reef?										
no nc	PN-b	Discharge any oil										
<b>ition</b> anatic		Was any fuel oil spilled or dumped within 50 nautical miles of shore ?										
	PN-c	Lose any fishing gear										
I (see MARPOL	PN-C	Was any fishing gear lost during this trip?										
MAR	PN-d	Abandon any fishing gear										
(see	riv-u	Was any fishing gear dumped or abandoned by the observer's host vessel?										
	PN-e	Fail to report any abandoned gear										
		Did vessel not report any lost fishing gear (IF REQUIRED by the country in which waters it is fishing)?										

	SS-a	Fail to monitor international Safety frequencies									
ea safety		Does the vessel keep its radio tuned into and turned onto the international distress, safety and calling frequencies when it is not communicating? Frequencies are:  VHF marine radio for medium to long range voice communications - 2182 kHz  VHF marine radio for short range voice communications - Channel 16									
Sea	SS-b	Carry out-of-date safety equipment  Was any of the safety equipment (lifeboats, EPIRBs, etc.) out of survey date or in a bad condition?									

Debriefing Status: Normally the 'pre-debriefer' or 'debriefer' should circle one choice to indicate if debriefing has taken place at any time on the GEN-3 form. It is possible that the form will be first circled -'not debriefed', then circled pre-debriefed and finally circled debriefed.

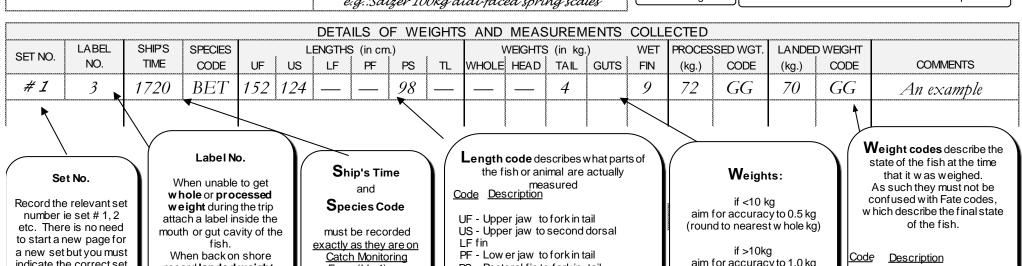
# **FORM GEN-4**

# SPC/FFA REGIONAL OBSERVER CONVERSION FACTORS

REVISED DEC.	REVISED DEC. 2016																			
OBSERVER NAME						MEASURING INSTRUMENT						OBSERVER TRIP ID No. PAGE OF							OF	
NEGOEI MANE						MAKE, MODEL AND CAPACITY OF SCALES						SHIP'S START OF TRIP DATE (YYYY/MM/DD) SHIP'S END OF TRIP DA						- 000000		
VESSEL NAME						MAKE, M	ODEL AND	CAPACII	Y OF SCA	LES			SHIP'S STA	RIOFIRIPI	DATE (YYYY	/MM/DD)	SHIP'S END	OF TRIP DAT	E (YYYY/M	M/DD)
								05 14/	<u> </u>		145 4 6	V 10 E 1 41	- NITO 6	201150	TE D		<u></u>			
									EIGHI	S AND				COLLEC						
SET NO.	SHIP'S	LABEL	SPECIES				in cm				WE	GHTS (in	kg.)			SED WGT.				
OLI IVO.	TIME	NO.	CODE	UF	US	LF	PF	PS	TL	WHOLE	HEAD	TAIL	GUTS	WET FIN	(kg.)	CODE	(kg.)	CODE		COMMENTS

#### Rev. DEC 2016 Notes on FORM GEN-4 CONVERSION FACTORS





indicate the correct set number for each line The set number is at the top of the PS-3 and LL-4 form

record landed weight.

If processed weight can be collected on board still use labels and then also record landed weight of fish as it is recorded at unloading. This can be used for checking weight loss during storage

Form (LL-4).on longliners or the set time and species from the Set Details Form (PS-3) on purse seiners

> If using Form GEN-4 but not using Form LL-4 (see \* below). record sex in the

PS - Pectoral fin to fork in tail

TL - Pectoral fin to second dorsal

- Total length (for sharks) measure the pectoral and second dorsal fins at the most forward points that they attach to the body

Collect "UF", "US" and "PS" for tunas Collect "LF", "PF" and "PS" for billfish aim for accuracy to 1.0 kg

Tunas: Include removed gills w ith guts when w eighing w hole weight.

Billfish: Include removed bills with guts when weighing w hole w eight

WW - Whole weight

GG - Gutted and gilled

GH - Gutted and headed GT - Gutted, gilled and tailed

GX - Gutted, headed and tailed

- Gutted only (gills left in)

NM - Not Measured

The GEN-4 form can be used to collect information from several sets (see the set number column on the left). As with all data it is important that you collect information as accurately as possible.

However, it is not important to collect this data for all catch. Usually only the more experienced and proven obsevers will be asked to collect this extra information. Only collect data for this form when it can be comfortably and accurately gathered without stopping the collection of other important data.

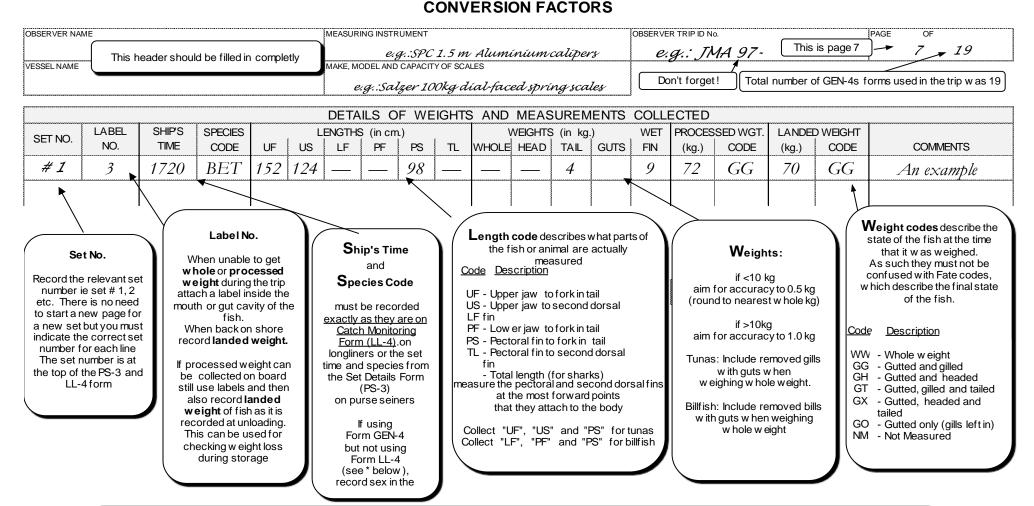
\* On some more difficult trips you may choose, or were asked, to take time out from normal sampling to put more effort into collecting conversion factor information. In this situation the Catch Monitoring Form may not be used. At times like this record the sex of the fish in the comments section of Form GEN-4.

The comments section can be used to note any factor that you feel has had an important influence on the data collection for this form.

# SPC/FFA REGIONAL OBSERVER CONVERSION FACTORS

REVISED DEC. 2016 OBSERVER NAME							MEASURING INSTRUMENT							TRIP ID No.					PAGE OF	
	-																			
VESSEL NAME N					MAKE, MODEL AND CAPACITY OF SCALES							SHIP'S START OF TRIP DATE (YYYY/MM/DD) SHIP'S END OF TRIP DA						TE (YYYY/MM/DD)		
						DET	AII C	OF \//	EICHI	LG VND	MEAS	HIDEM	ENITS (	COLLEC.	TED					
	SHIPS	LABEL	SPECIES			ENGTHS			EIGHI	AIND		GHTS (in	ENTS COLLECTED  n kg.) PROCESSED WGT. LANDED WEIGHT							
SET NO.	TIME	NO.	CODE	UF	US	LF	PF		TL	WHOLE	HEAD	TAIL	GUTS	WET FIN		CODE	(kg.)	CODE	COMMENT	S

# Rev. DEC 2016 Notes on FORM GEN-4



The GEN-4 form can be used to collect information from several sets (see the set number column on the left).

As with all data it is important that you collect information as accurately as possible.

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Only collect data for this form when it can be comfortably and accurately gathered without stopping the collection of other important data.

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In this situation the Catch Monitoring Form may not be used. At times like this record the sex of the fish in the comments section of Form GEN-4.

The comments section can be used to note any factor that you feel has had an important influence on the data collection for this form.

# **FAD/PAYAO and FLOATING OBJECTS** INFORMATION RECORD

Form GEN-5

REVISED DEC. 2016 PAGE OF OBSERVER VESSEL **OBSERVER** TRIP ID NAME: NAM E: NUMBER:  $\mathbf{E}$ Comments / Change details Time Object Origin of Deployment latitude and longitude FAD as FAD FAD as Date Set No. ddd°mm.mmm'  $\mathbf{W}$ (from PS-2) number **FAD** date dd°mm.mmm' found lifted left YES / NO **FAD** materials net/mesh net/mesh Max est. FAD **FAD** FAD / Payao No. SSI SSI Buov Main materials siz.e **Attachments** size depth length width number and or markings seen trapped Y/N/U Y/N/U M M M cm cm Comments / Change details Deployment latitude and longitude FAD as FAD FAD as Date Time Origin of  $\mathbf{E}$ Object Set No.  $\mathbf{S}$ ddd°mm.mmm' W (from PS-2) number **FAD** dd°mm.mmm' found lifted left YES / NO FAD materials net/mesh net/mesh Max est. FAD **FAD Buov** FAD / Payao No. SSI SSI Main materials **Attachments** length and or markings size size depth width number seen trapped Y/N/U Y/N/U M M M cm cm Comments / Change details Origin of Deployment latitude and longitude  $\mathbf{E}$ Date Time Object FAD as FAD FAD as Set No. (from PS-2) dd°mm.mmm' ddd°mm.mmm' W number **FAD** found lifted left YES / NO Max est. FAD / Payao No. SSI FAD materials net/mesh net/mesh **FAD FAD Buov** SSI Main materials **Attachments** depth length width and or markings siz.e siz.e number seen trapped Y/N/U Y/N/U M M M cm cm Comments / Change details Date Time Object Origin of Deployment latitude and longitude E FAD as FAD FAD as Set No. dd°mm.mmm' S ddd°mm.mmm'  $\mathbf{W}$ (from PS-2) number **FAD** found lifted left YES / NO FAD materials **FAD** FAD / Payao No. SSI SSI net/mesh net/mesh Max est. **FAD Buov** Main materials size Attachments depth length width number and or markings trapped siz.e seen Y/N/U Y/N/U M M M

Diagrams-label with 'Object number'

cm

cm

#### FAD/PAYAO and FLOATING OBJECT INFORMATION RECORD

Complete a GEN-5 record for every activity code '9' or '10D' entered on a PS-2, related to any FAD or other floating object described in the 'Floating Object' list on the workbook codes page.

(except if for same object encountered unchanged within four hours of previous encounter)

**Observer name, Vessel name** - Print each name out in full. For example: an observer name = "John Smith"; and a vessel name = "Mahino No 8")

**Observer trip ID number**: - number issued by the authority that placed the observer.

**Page of :** Number "Form GEN-5"s throughout the trip as Page 1, Page 2, Page 3, etc. At end of trip put the last page number on every page.

For example if there are 10 x FAD Information Forms filled out then the first page will be "Page 1 of 10", the fourth page will be "Page 4 of 10" and the last page will be "Page 10 of 10".

**Date & Time** - Must match the PS-2 form time for the activity code related to this floating object. Use "Ship's Date" and "Ship's Time" on the ship's clock - the date and time used by crew onboard. Observers should set their watches to this date and time as soon as they board the vessel.

**Set Number** - If object is involved in a set during this encounter record the same Set No. that is recorded on the daily activity sheet (PS-2). If no set is made record a dash in this space.

**Object Number** - Give new (consecutive) 'Object Number' to each floating object. Start with 001. If that same object is recognised in future activities use the same 'Object Number' in the record. If it comes onboard it still gets an Object No. and if returned to water at same place, number stays the same, however if it goes to a different area it gets a new number and a new record is created.

Origin of FAD - Try to find out the origin of the object before this current encounter. Use the "Origin" code that best describes where the FAD or floating object came from. If you cannot find out where the FAD came from, use the code for "unknown". If origin not listed use "other" and describe in comments. Also use comments for additional details N.B. The difference between Code "5" or "6" and Code "7" is that the FAD in that codes 5 or 6 are used for will have a radio buoy still attached, whereas the FAD (or other floating object) will no longer have a buoy attached to it.

**Deployment date, latitude** and **longitude** - If deployment is not actually witnessed by observer efforts try to get this information from the vessel's records, if applicable. Otherwise enter dashes.

#### FAD as Found. FAD lifted and FAD as Left

Shows what an object is when it is found and if it has changed by the time the vessel leaves it. N.B.: Complete the 'FAD as Found' field only if object was found in the water - if the object is a FAD being deployed for the first time then only record a dash in the 'FAD as found' field. Circle YES or NO to show if FAD was lifted from water at any time.

Watch for changes being made to any found floating object before the vessel leaves it adrift again. If no modifications were made to the object, the 'As found' and 'As Left' fields should be identical. If object is brought aboard vessel and moved to another area put a dash in the 'FAD as left' field. A new record will be created if that floating object is redeployed.

#### FAD Materials - Main Materials, FAD Attachments and Net/mesh size

Most materials found in the main body (or platform) of floating objects and those commonly used for attachments under FADs have codes '1' to '17' in the list under 'FAD materials' on this form.

N.B.: some materials can be used as main material or as attachment materials

so the material codes amy be used twice - describing both the main and the attachment materials.

If many materials make up the body of a FAD, list up to 3 of them starting with the most abundant.

If the object has a component not included in the list use other code "17" and describe in comments. If not sure of the material use unknown code "10" and describe it, if possible.

If possible get diagonal mesh measurements of net used to make the platform and/or attachments

Max Est Depth (maximum estimated depth)Record the estimated depth (in metres) below the surface of the water of any objects, streamers or other equipment attached to the FAD (but not including the anchor rope or chain) at the time the object is found (or deployed, if the deployment is the reason for this record). If there are any attachments at all always make an estimate even if estimating depth is very difficult. - comment on the difficulty.

THE WCPFC recognises live whale sharks, marine mammals etc as FADs. Just dash through any data fields on the GEN-5 form that are not relevant if the FAD is a live animal.

#### Fad Length & Fad Width

Record dimensions (length and width) of the man body of a floating object or FAD when it is found (or deployed if the deployment is the reason for this record).

If the object has an irregular shape or is made up of multiple components, imagine a box with the object in it and record the length and width dimensions of the imaginary box.

### Buoy number and FAD/PAYO Numbers and markings

Record any identification numbers seen on any radio buoy (or other buoy) that is attached to the floating object or FAD, or any ID numbers or other markings that can be seen on the FAD/Pay ao itself. If only part of an identification number can be seen then record the parts that can be seen and show question marks for letters or numbers that cannot be read (e.g. STV-76??3H)

**SSI seen** and **SSI trapped** - circle 'Y' = yes, 'N' = no; or 'U' = unknown to state if any **Species of Special Interest** (SSI) is seen near the object and again to state if any SSI is trapped, whether with webbing, ropes, cloth, buckets, between the bars in a rack or other. NB - use 'N' only if top of FAD (in water) and attachments (when FAD is lifted) are clearly seen. Write the name of the SSI species in the Comments area and be sure to fill in a GEN-2 form.

#### Comments / Change details

Record any information that will help identify a FAD or floating object and any information that can help understand why the FAD or floating object works well or doesn't work well. If a FAD has been changed describe the changes. with notes and refer to more description that are written in the observer's trip report and/or daily journal.

Diagrams - A drawing of an object can be very helpful.

# FAD/PAYAO and FLOATING OBJECTS INFORMATION RECORD

Form GEN-5

REVISED DEC. 2016

OBSERVER NAME:				VESSEL NAME:					OBSERVER TRIP ID NUMBER:			PAGE OF
Date Time (from PS-2)	Set No.	Object number	Origin of FAD	Deployn date	nent latitu dd°mm.m		and longi ddd°mm.m		FAD as found	FAD lifted	FAD as left	Comments / Change details
										YES / NO		
FAD materials net/ma			net/mesh	Max est.	FAD	FAD	Buoy		ayao No.	SSI	SSI	
Main materials size	e Atta	achments	size	depth	length	width	number	and or 1	narkings	seen	trapped	
	cm		cm	M	M	M				Y/N/U	Y/N/U	
Date Time	Set No.	Object	Origin of		nent latitu		and longi		FAD as	FAD	FAD as	Comments / Change details
(from PS-2)		number	FAD	date	dd°mm.m	mm' S	ddd°mm.n	mm' W	found	lifted	left	
										YES / NO		
FAD materials net/ma	1	1	net/mesh	Max est.	FAD	FAD	Buoy		ayao No.	SSI	SSI	
Main materials size	e Atta	achments	size	depth	length	width	number	and or 1	narkings	seen	trapped	
	cm		cm	M	M	M				Y/N/U	Y/N/U	
Date Time	Set No.	Object	Origin of		nent latitu		and longi		FAD as	FAD	FAD as	Comments / Change details
(from PS-2)		number	FAD	date	dd°mm.m	mm' S	ddd°mm.n	mm' W	found	lifted	left	
										YES / NO		
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Main materials size	e Atta	achments	size	depth	length	width	number	and or i	narkings	seen	trapped	
	cm		cm	M	M	M				Y/N/U	Y/N/U	
Date Time	Set No.	Object	Origin of		nent latitu		and longi		FAD as	FAD	FAD as	Comments / Change details
(from PS-2)		number	FAD	date	dd°mm.m	mm' S	ddd°mm.n	mm' W	found	lifted	left	
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	cm		cm	M	M	M				Y/N/U	Y/N/U	

<u>Diagrams</u>- label with 'Object number'

#### FAD/PAYAO and FLOATING OBJECT INFORMATION RECORD

Complete a GEN-5 record for every activity code '9' or '10D' entered on a PS-2, related to any FAD or other floating object described in the 'Floating Object' list on the workbook codes page.

(except if for same object encountered unchanged within four hours of previous encounter)

Observer name, Vessel name - Print each name out in full.

For example: an observer name = "John Smith"; and a vessel name = "Mahino No 8")

**Observer trip ID number**: - number issued by the authority that placed the observer.

**Page of**: Number "Form GEN-5"s throughout the trip as Page 1, Page 2, Page 3, etc. At end of trip put the last page number on every page.

For example if there are  $10 \times FAD$  Information Forms filled out then the first page will be "Page 1 of 10", the fourth page will be "Page 4 of 10" and the last page will be "Page 10 of 10".

**Date & Time** - Must match the PS-2 form time for the activity code related to this floating object. Use "Ship's Date" and "Ship's Time" on the ship's clock - the date and time used by crew onboard. Observers should set their watches to this date and time as soon as they board the vessel.

**Set Number** - If object is involved in a set during this encounter record the same Set No. that is recorded on the daily activity sheet (PS-2). If no set is made record a dash in this space.

**Object Number** - Give new (consecutive) 'Object Number' to each floating object. Start with 001. If that same object is recognised in future activities use the same 'Object Number' in the record. If it comes onboard it still gets an Object No. and if returned to water at same place, number stays the same, however if it goes to a different area it gets a new number and a new record is created.

Origin of FAD - Try to find out the origin of the object before this current encounter. Use the "Origin" code that best describes where the FAD or floating object came from. If you cannot find out where the FAD came from, use the code for "unknown". If origin not listed use "other" and describe in comments. Also use comments for additional details N.B. The difference between Code "5" or "6" and Code "7" is that the FAD in that codes 5 or 6 are used for will have a radio buoy still attached, whereas the FAD (or other floating object) will no longer have a buoy attached to it.

**Deployment date, latitude** and **longitude** - If deployment is not actually witnessed by observer efforts try to get this information from the vessel's records, if applicable. Otherwise enter dashes.

#### FAD as Found, FAD lifted and FAD as Left

Shows what an object is when it is found and if it has changed by the time the vessel leaves it. N.B.: Complete the 'FAD as Found' field only if object was found in the water - if the object is a FAD being deployed for the first time then only record a dash in the 'FAD as found' field. Circle YES or NO to show if FAD was lifted from water at any time.

Watch for changes being made to any found floating object before the vessel leaves it adrift again. If no modifications were made to the object, the 'As found' and 'As Left' fields should be identical. If object is brought aboard vessel and moved to another area put a dash in the 'FAD as left' field. A new record will be created if that floating object is redeployed.

#### FAD Materials - Main Materials, FAD Attachments and Net/mesh size

Most materials found in the main body (or platform) of floating objects and those commonly used for attachments under FADs have codes '1' to '17' in the list under 'FAD materials' on this form.

N.B.: some materials can be used as main material or as attachment materials

so the material codes amy be used twice - describing both the main and the attachment materials.

If many materials make up the body of a FAD, list up to 3 of them starting with the most abundant.

If the object has a component not included in the list use other code "17" and describe in comments. If not sure of the material use unknown code "10" and describe it, if possible.

If possible get diagonal mesh measurements of net used to make the platform and/or attachments

Max Est Depth (maximum estimated depth)Record the estimated depth (in metres) below the surface of the water of any objects, streamers or other equipment attached to the FAD (but not including the anchor rope or chain) at the time the object is found (or deployed, if the deployment is the reason for this record). If there are any attachments at all always make an estimate even if estimating depth is very difficult. - comment on the difficulty.

THE WCPFC recognises live whale sharks, marine mammals etc as FADs. Just dash through any data fields on the GEN-5 form that are not relevant if the FAD is a live animal.

#### Fad Length & Fad Width

Record dimensions (length and width) of the man body of a floating object or FAD when it is found (or deployed if the deployment is the reason for this record).

If the object has an irregular shape or is made up of multiple components, imagine a box with the object in it and record the length and width dimensions of the imaginary box.

#### Buoy number and FAD/PAYO Numbers and markings

Record any identification numbers seen on any radio buoy (or other buoy) that is attached to the floating object or FAD, or any ID numbers or other markings that can be seen on the FAD/Pay ao itself. If only part of an identification number can be seen then record the parts that can be seen and show question marks for letters or numbers that cannot be read (e.g. STV-76??3H)

**SSI seen** *and* **SSI trapped** - *circl* e 'Y' = yes, 'N' = no; *or* 'U' = unknown to state if any **Species of Special Interest** (SSI) is seen near the object and again to state if any SSI is trapped, whether with webbing, ropes, cloth, buckets, between the bars in a rack or other. NB - use 'N' only if top of FAD (in water) and attachments (when FAD is lifted) are clearly seen. Write the name of the SSI species in the Comments area and be sure to fill in a GEN-2 form.

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Record any information that will help identify a FAD or floating object and any information that can help understand why the FAD or floating object works well or doesn't work well. If a FAD has been changed describe the changes. with notes and refer to more description that are written in the observer's trip report and/or daily journal.

**Diagrams** - A drawing of an object can be very helpful.

# FAD/PAYAO and FLOATING OBJECTS INFORMATION RECORD

Form GEN-5

**REVISED DEC. 2016** PAGE OF OBSERVER OBSERVER VESSEL TRIP ID NAM E: NAME: NUMBER: Comments / Change details Date Time Object Origin of Deployment latitude N and longitude  $\mathbf{E}$ FAD as FAD FAD as Set No. (from PS-2) number FAD date dd°mm.mmm' ddd°mm.mmm' W found lifted left YES / NO FAD materials **FAD** FAD / Payao No. SSI SSI net/mesh Max est. **FAD** net/mesh **Buov** Attachments Main materials siz.e length width and or markings siz.e depth number seen trapped Y/N/U Y/N/U M cm cm Comments / Change details Date Time Object Origin of Deployment latitude N and longitude  $\mathbf{E}$ FAD as **FAD** FAD as Set No. number dd°mm.mmm' ddd°mm.mmm' (from PS-2) FAD found lifted left YES / NO FAD FAD / Payao No. **FAD** materials Max est. **FAD** Buoy SSI SSI net/mesh net/mesh Attachments Main materials size size depth length width number and or markings trapped seen Y/N/U Y/N/UM M M cm cm Comments / Change details Date Time Object Origin of Deployment latitude N and longitude  $\mathbf{E}$ FAD as **FAD** FAD as Set No. ddd°mm.mmm' (from PS-2) number FAD date dd°mm.mmm' W found lifted left YES / NO FAD **FAD** FAD / Payao No. SSI **FAD** materials net/mesh net/mesh Max est. Buov SSI Attachments Main materials siz.e length and or markings size depth width number seen trapped Y/N/U Y/N/UM M M cm cm Comments / Change details Date Time Object Origin of Deployment latitude and longitude FAD as **FAD** FAD as Set No. (from PS-2) number FAD date dd°mm.mmm' ddd°mm.mmm' W found lifted left YES / NO FAD materials **FAD** FAD / Payao No. SSI Max est. **FAD** SSI net/mesh net/mesh **Buov** Main materials Attachments siz.e depth length width number and or markings size seen trapped Y/N/U Y/N/U M M M cm cm

<u>Diagrams</u>- label with 'Object number'

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**Observer name, Vessel name** - Print each name out in full. For example: an observer name = "John Smith"; and a vessel name = "Mahino No 8")

**Observer trip ID number**: - number issued by the authority that placed the observer.

Page of : Number "Form GEN-5"s throughout the trip as Page 1, Page 2, Page 3, etc. At end of trip put the last page number on every page.

For example if there are 10 x FAD Information Forms filled out then the first page will be "Page 1 of 10", the fourth page will be "Page 4 of 10" and the last page will be "Page 10 of 10".

**Date & Time** - Must match the PS-2 form time for the activity code related to this floating object. Use "Ship's Date" and "Ship's Time" on the ship's clock - the date and time used by crew onboard. Observers should set their watches to this date and time as soon as they board the vessel.

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Origin of FAD - Try to find out the origin of the object before this current encounter. Use the "Origin" code that best describes where the FAD or floating object came from. If you cannot find out where the FAD came from, use the code for "unknown". If origin not listed use "other" and describe in comments. Also use comments for additional details N.B. The difference between Code "5" or "6" and Code "7" is that the FAD in that codes 5 or 6 are used for will have a radio buoy still attached, whereas the FAD (or other floating object) will no longer have a buoy attached to it.

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Most materials found in the main body (or platform) of floating objects and those commonly used for attachments under FADs have codes '1' to '17' in the list under 'FAD materials' on this form.

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If the object has a component not included in the list use other code "17" and describe in comments. If not sure of the material use unknown code "10" and describe it, if possible.

If possible get diagonal mesh measurements of net used to make the platform and/or attachments

Max Est Depth (maximum estimated depth)Record the estimated depth (in metres) below the surface of the water of any objects, streamers or other equipment attached to the FAD (but not including the anchor rope or chain) at the time the object is found (or deployed, if the deployment is the reason for this record). If there are any attachments at all always make an estimate even if estimating depth is very difficult. - comment on the difficulty.

THE WCPFC recognises live whale sharks, marine mammals etc as FADs. Just dash through any data fields on the GEN-5 form that are not relevant if the FAD is a live animal.

#### Fad Length & Fad Width

Record dimensions (length and width) of the man body of a floating object or FAD when it is found (or deployed if the deployment is the reason for this record).

If the object has an irregular shape or is made up of multiple components, imagine a box with the object in it and record the length and width dimensions of the imaginary box.

#### Buoy number and FAD/PAYO Numbers and markings

Record any identification numbers seen on any radio buoy (or other buoy) that is attached to the floating object or FAD, or any ID numbers or other markings that can be seen on the FAD/Payao itself. If only part of an identification number can be seen then record the parts that can be seen and show question marks for letters or numbers that cannot be read (e.g. STV-76??3H)

**SSI seen** and **SSI trapped** - circle 'Y' = yes, 'N' = no; or 'U' = unknown to state if any **Species of Special Interest** (SSI) is seen near the object and again to state if any SSI is trapped, whether with webbing, ropes, cloth, buckets, between the bars in a rack or other.

NB - use 'N' only if top of FAD (in water) and attachments (when FAD is lifted) are clearly seen.

Write the name of the SSI species in the Comments area and be sure to fill in a GEN-2 form.

#### **Comments / Change details**

Record any information that will help identify a FAD or floating object and any information that can help understand why the FAD or floating object works well or doesn't work well. If a FAD has been changed describe the changes. with notes and refer to more description that are written in the observer's trip report and/or daily journal.

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# FAD/PAYAO and FLOATING OBJECTS INFORMATION RECORD

Form GEN-5

Date   Time (from PS-2)   Set No.   Object (from PS-2)   Name:   Nam	Date (from PS-	S-2) Set No	number FAD	NAME:  f Deployment latitude N	and longitude E FAD as		
FAD materials   net/mesh   number   FAD   date   dd°mm.mmm'   S   ddd°mm.mmm'   W   found   lifted   left   YES/NO	(from PS-	S-2) Set No	number FAD				Comments / Change details
FAD materials   net/mesh   number   FAD   date   dd°mm.mmm'   S   ddd°mm.mmm'   W   found   lifted   left   YES/NO	(from PS-	S-2) Set No	number FAD				
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Main materials       size       Attachments       size       depth       length       width       number       and or markings       seen       trapped         Date       Time (from PS-2)       Set No.       Object number       Origin of EAD       Deployment latitude dd°mm.mmm'       N       and longitude       E       FAD as found lifted       FAD as left         FAD materials Main materials       net/mesh size       Max est. Attachments       FAD size       Buoy HAD Payao No. SSI seen       SSI seen       SSI trapped         Main materials (from PS-2)       cm       Max est. FAD length       width       number       FAD Payao No. SSI seen       SSI seen       Trapped         Main materials (from PS-2)       cm       Max est. FAD length       width       number       FAD Payao No. SSI seen       SSI seen       Trapped         Max est. FAD cm       size       depth length       width       number       and or markings       seen       trapped         Max est. FAD cm       size       depth length       width       number       FAD /Payao No. SSI seen       SSI seen       SSI seen       trapped         Max est. FAD cm       size       depth length       width       number       FAD /Payao No. SSI seen       SSI seen       trapped		als net/mesh					
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Diagrams- label with 'Object number'

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# Form GEN-5

# FAD/PAYAO and FLOATING OBJECTS INFORMATION RECORD

REVISED DEC. 2016

OBSERVER NAME:	VESSEL NAM E:	OBSERVER TRIP ID NUMBER:		PAGE OF
Date Time Set No. Object Origi		and longitude E FAD as	FAD FAD as	Comments / Change details
(from PS-2) number FA	date dd°mm.mmm' S	ddd°mm.mmm' W found	lifted left	
			YES / NO	
FAD materials net/mesh net/m	sh Max est. FAD FAD	Buoy FAD / Payao No.	SSI SSI	
Main materials size Attachments siz	depth length width	number and or markings	seen trapped	
cm	cm M M M		Y/N/U Y/N/U	
Date Time Set No. Object Origi	of Deployment latitude N	and longitude E FAD as	FAD FAD as	Comments / Change details
(from PS-2) Set No. number FA	date dd°mm.mmm' S	ddd°mm.mmm' W found	lifted left	
			YES / NO	
FAD materials net/mesh net/m	sh Max est. FAD FAD	Buoy FAD / Payao No.	SSI SSI	
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Date Time Set No. Object Origi	of Deployment latitude N	and longitude E FAD as	FAD FAD as	Comments / Change details
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Main materials size Attachments siz	depth length width	number and or markings	seen trapped	
cm	cm M M M		Y/N/U Y/N/U	

<u>Diagrams</u>- label with 'Object number'

#### FAD/PAYAO and FLOATING OBJECT INFORMATION RECORD

Complete a GEN-5 record for every activity code '9' or '10D' entered on a PS-2, related to any FAD or other floating object described in the 'Floating Object' list on the workbook codes page.

(except if for same object encountered unchanged within four hours of previous encounter)

Observer name, Vessel name - Print each name out in full. For example: an observer name = "John Smith"; and a vessel name = "Mahino No 8")

**Observer trip ID number**: - number issued by the authority that placed the observer.

For example if there are 10 x FAD Information Forms filled out then the first page will be "Page 1 of 10", the fourth page will be "Page 4 of 10" and the last page will be "Page 10 of 10".

**Date & Time** - Must match the PS-2 form time for the activity code related to this floating object. Use "Ship's Date" and "Ship's Time" on the ship's clock - the date and time used by crew onboard. Observers should set their watches to this date and time as soon as they board the vessel.

**Set Number** - If object is involved in a set during this encounter record the same Set No. that is recorded on the daily activity sheet (PS-2). If no set is made record a dash in this space.

**Object Number** - Give new (consecutive) 'Object Number' to each floating object. Start with 001. If that same object is recognised in future activities use the same 'Object Number' in the record. If it comes onboard it still gets an Object No. and if returned to water at same place, number stays the same, however if it goes to a different area it gets a new number and a new record is created.

Origin of FAD - Try to find out the origin of the object before this current encounter.

Use the "Origin" code that best describes where the FAD or floating object came from.

If you cannot find out where the FAD came from, use the code for "unknown".

If origin not listed use "other" and describe in comments. Also use comments for additional details N.B. The difference between Code "5" or "6" and Code "7" is that the FAD in that codes 5 or 6 are used for will have a radio buoy still attached, whereas the FAD (or other floating object) will no longer have a buoy attached to it.

**Deployment date, latitude** and **longitude** - If deployment is not actually witnessed by observer efforts try to get this information from the vessel's records, if applicable. Otherwise enter dashes.

#### FAD as Found. FAD lifted and FAD as Left

Shows what an object is when it is found and if it has changed by the time the vessel leaves it. N.B.: Complete the 'FAD as Found' field only if object was found in the water - if the object is a FAD being deployed for the first time then only record a dash in the 'FAD as found' field. Circle YES or NO to show if FAD was lifted from water at any time.

Watch for changes being made to any found floating object before the vessel leaves it adrift again. If no modifications were made to the object, the 'As found' and 'As Left' fields should be identical. If object is brought aboard vessel and moved to another area put a dash in the 'FAD as left' field. A new record will be created if that floating object is redeployed.

#### FAD Materials - Main Materials, FAD Attachments and Net/mesh size

Most materials found in the main body (or platform) of floating objects and those commonly used for attachments under FADs have codes '1' to '17' in the list under 'FAD materials' on this form.

N.B.: some materials can be used as main material or as attachment materials

so the material codes amy be used twice - describing both the main and the attachment materials. If many materials make up the body of a FAD, list up to 3 of them starting with the most abundant.

If the object has a component not included in the list use other code "17" and describe in comments. If not sure of the material use unknown code "10" and describe it, if possible.

If possible get diagonal mesh measurements of net used to make the platform and/or attachments

Max Est Depth (maximum estimated depth)Record the estimated depth (in metres) below the surface of the water of any objects, streamers or other equipment attached to the FAD (but not including the anchor rope or chain) at the time the object is found (or deployed, if the deployment is the reason for this record). If there are any attachments at all always make an estimate even if estimating depth is very difficult. - comment on the difficulty.

THE WCPFC recognises live whale sharks, marine mammals etc as FADs. Just dash through any data fields on the GEN-5 form that are not relevant if the FAD is a live animal.

#### Fad Length & Fad Width

Record dimensions (length and width) of the man body of a floating object or FAD when it is found (or deployed if the deployment is the reason for this record).

If the object has an irregular shape or is made up of multiple components, imagine a box with the object in it and record the length and width dimensions of the imaginary box.

#### Buoy number and FAD/PAYO Numbers and markings

Record any identification numbers seen on any radio buoy (or other buoy) that is attached to the floating object or FAD, or any ID numbers or other markings that can be seen on the FAD/Payao itself. If only part of an identification number can be seen then record the parts that can be seen and show question marks for letters or numbers that cannot be read (e.g. STV-76??3H)

**SSI seen** and **SSI trapped** - circl e 'Y' = yes, 'N' = no; or 'U' = unknown to state if any **Species of Special Interest** (SSI) is seen near the object and again to state if any SSI is trapped, whether with webbing, ropes, cloth, buckets, between the bars in a rack or other.

NB - use 'N' only if top of FAD (in water) and attachments (when FAD is lifted) are clearly seen.

Write the name of the SSI species in the Comments area and be sure to fill in a GEN-2 form.

### Comments / Change details

Record any information that will help identify a FAD or floating object and any information that can help understand why the FAD or floating object works well or doesn't work well. If a FAD has been changed describe the changes. with notes and refer to more description that are written in the observer's trip report and/or daily journal.

**Diagrams** - A drawing of an object can be very helpful.

# SPC/FFA REGIONAL OBSERVER POLLUTION REPORT

REVISED Dec. 2016

FORM GEN-6

OBSERVER NAME	V	VESSEL NAME OBSER					D NUME	BER	PAGE OF		
	- fill in	one form	ı for <u>e</u>	ach p	ollutio	on incider	nt -		•		
INCIDENT DETAILS											
Ship's DATE and TIME YY MM DD hh	mm (	LATITUDE (ddmm.mmm'	')	N/S	LONGITUDE E/W (dddmm.mmm')			/ W	EEZ / HARBOUR		
		(	´		(						
WIND DIRECTION WIND SP	EED SE	SEA CONDITIONS CUR (C, S, M, R)			RENT : (k	BSERVER'S VESSEL ACTIVITY					
NAME OF OFFENDING VESSE		IRCS	TYPE	OF VES	SEL		R POSIT ass Bear	ROM OFFENDING VESSEL Distance (nautical miles)			
	<b>!</b>	WASTE	DUMF	PED OV	ERBO	ARD			<b>!</b>		
Material Tick each box that applies	Descr	ribe Type					Des	cribe	Quantity		
Plastics											
Metals											
Waste oil											
Chemicals											
General garbage											
(within 12 miles of shoreline)											
OIL SPILLAGES AND LEAKAGES											
Source	Tick each box that applies	Visua	al App	earan	ce / Co	olour	Des	scrib	e Area and Quantity		
Vessel Aground / Collision											
Vessel at Anchor / Berth											
Vessel Underway											
Land based source - Describe	source										
Other - please specifiy											
		Abandon	ed or	Lost Fi	shing (	Gear					
Source	Activity		Desc	cribe C	ear			Es	timate Quantity		
Lost during fishing											
Abandoned											
Dumped	Dumped										
Other comments:											
Were there any stickers/pe Did you take any photos? If yes, please state the nun	_	_				about Ma	ARPC	DL R	regulations? Y/N		

# MARPOL Regualations - state

It is illegal for any vessel to discard any form of plastics into the sea at anytime. It is illegal for any vessel to discard any form of oil into the sea less than 50 nautical miles (nm) from shore. It is illegal for any vessel to dump any form of rubbish into the sea within 12 nautical mile of the shore, unless the vessel has a machine on-board (comminuter) to shred and treat the waste. In this case they can release the treated garbage up to 3 nm from the shore.

### **POLLUTION REPORT**

Remember - Fill in one form for each pollution incident. There might be more than one per day. If forms run out, report this on the last form and continue recording pollution infringements in diary.

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Observer Name	Put first name first, and your family name last.
Vessel Name	Record the full name of the vessel. Do not use any abbrevations.
Observer ID Number	Use the number assigned by the observer programme e.g. AA 03-01
Page of	Number all GEN-6 pages in sequence from the start until the end of the trip
Date of Incident ( yy / mm /dd)	Date pollution seen in year, month and day. Use ship's time as defined in other
Time (00.00 hrs)	Report the time using the 24hr clock. Observer data collection forms
Latitude / Longitude	Record the GPS positon of the host vessel when the pollution was first seen.
EEZ / Harbour	Record the EEZ or, for shorebase staff, mark port or Harbour name here.
Wind Direction	The prevailing wind direction. Use degree eg. 90 degrees for an east wind
Wind Speed	Record the prevailing wind speed.
Sea Conditions	C- Calm, S- Slight, M- Moderate, R - Rough.
Current (knts and direction)	If the vessel has a current meter find out what the current strength is.
	State the host (observer's) vessel activity at the time of the pollution incident.
Observer's vessel activity	Some activities to consider might be:
	fishing; transhipping; bunkering; transitting; aground.
	Make an effort to record the complete and proper name of offending vessel.
Name of offending vessel	Be careful not to make any spelling mistakes which may make it difficult to
3	prosecute the vessel if the report goes through legal proceedings.
IRCS	The international callsign is marked in large letters on the side of the boat.
Type of vessel	Consider the full vessel and aircraft codes on the front of Form GEN-1.
	Use the vessel compass to get direction of theoffending vessel from the obs.'
Your positon from offending	vessel. The radar can be used to get an extact distance in nautical miles.
vessel.	Otherwise give your best estimate.
	WASTE DUMPED OVERBOARD
	Tick the appropriate data field to show which types of materials were
	dumped. Only a maxium of two materials ifmore than one material type
Material	dumped over at the same time - e.g.: it dumped plastic and metal at
	10:00hrs. If plastic was dumped at 10:00hrs and metal at 16:00hrs - record
D'	Give as good a description as possible of the type of dumped material.
Describe type	E.g.: - plastic bags; bait boxes plastic strapping; bait boxes plastic bags;
	Give a best estimate of the amount dumped. Sometimes this will be easy -
	e.g., 12 metal oil drums were dumped. At other times the material might be
Describe Quantities	too far away to see the amount. If it is too far away then estimate the
	amount as well as possible and make note that it is only a rough estimate at
	OIL SPILLAGES AND LEAKAGES
Source	Tick to indicate where the spillage or leak came from
Visual Appearance / Colour	Describe the colour/ thickness/depth of the spill as well as able.
	Give a best estimate of the size of the spill.
Describe Area and Quantity	The boat could be a size reference - e.g.: it was 4 times bigger than the boat.
	Abandoned or Lost Fishing Gear
	There is no tick box. Indicate the source of the abandoned/ lost fishing gear by completing
Source	the information for the corresponding row of information. For instance if the source is 'lost
	during fishing' fill in the activity, describe gear, and estimate quantity on the line to the right
	of 'lost during fishing'.  Use this line if the gear was <u>accidentally</u> lost from the observer's vessel
Source - Lost during fishing	during this trip and the vessel tried to search and recover the gear.
Coardo Lost during haming	Use this line if the gear was <u>deliberately</u> abandoned from the observer's
Course Alexanders !	vessel during the trip, or similarly the vessel made no effort to retrive the gear.
Source - Abandoned	
	Use this line if the vessel deliberately dumped any fishing gear overboard
Source - Dumped	(either old fishing gear, or some of the gear that was used during the trip).
***************************************	Record your vessel's activity when gear was lost, abandoned or dumped.
Activity	This might be setting, hauling, steaming etc.
-	Given information on the gear, especially the type of materials it was made of
	(e.g. aluminium, nylon rope) and its make up - fishing net 10cm mesh, old
Describe Gear	monofilament branchline, no hooks
Estimate Quantifty	Refer to the total area in square meters. Mention the length, breadth and width.

# SPC/FFA REGIONAL OBSERVER POLLUTION REPORT

REVISED Dec. 2016

FORM GEN-6

OBSERVER NAME	V	VESSEL NAME OBSER					D NUME	BER	PAGE OF		
	- fill in	one form	ı for <u>e</u>	ach p	ollutio	on incider	nt -		•		
INCIDENT DETAILS											
Ship's DATE and TIME YY MM DD hh	mm (	LATITUDE (ddmm.mmm'	')	N/S	LONGITUDE E/W (dddmm.mmm')			/ W	EEZ / HARBOUR		
		(	´		(						
WIND DIRECTION WIND SP	EED SE	SEA CONDITIONS CUR (C, S, M, R)			RENT : (k	BSERVER'S VESSEL ACTIVITY					
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	<b>!</b>	WASTE	DUMF	PED OV	ERBO	ARD			<b>!</b>		
Material Tick each box that applies	Descr	ribe Type					Des	cribe	Quantity		
Plastics											
Metals											
Waste oil											
Chemicals											
General garbage											
(within 12 miles of shoreline)											
OIL SPILLAGES AND LEAKAGES											
Source	Tick each box that applies	Visua	al App	earan	ce / Co	olour	Des	scrib	e Area and Quantity		
Vessel Aground / Collision											
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Vessel Underway											
Land based source - Describe	source										
Other - please specifiy											
		Abandon	ed or	Lost Fi	shing (	Gear					
Source	Activity		Desc	cribe C	ear			Es	timate Quantity		
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### **POLLUTION REPORT**

Remember - Fill in one form for each pollution incident. There might be more than one per day. If forms run out, report this on the last form and continue recording pollution infringements in diary.

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<u> </u>
Observer Name	Put first name first, and your family name last.
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Sea Conditions	C- Calm, S- Slight, M- Moderate, R - Rough.
Current (knts and direction)	If the vessel has a current meter find out what the current strength is.
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	WASTE DUMPED OVERBOARD
	Tick the appropriate data field to show which types of materials were
Material	dumped. Only a maxium of two materials ifmore than one material type
Wateriai	dumped over at the same time - e.g.: it dumped plastic and metal at
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Describe type	E.g.: - plastic bags; bait boxes plastic strapping; bait boxes plastic bags;
	Give a best estimate of the amount dumped. Sometimes this will be easy -
Describe Quantities	e.g., 12 metal oil drums were dumped. At other times the material might be
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	amount as well as possible and make note that it is only a rough estimate at
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Louinale Qualitity	The state of the s

#### SPC/FFA REGIONAL OBSERVER FORM GEN-6 **POLLUTION REPORT** REVISED Dec. 2016 VESSEL NAME OBSERVER NAME OBSERVER ID NUMBER PAGE OF - fill in one form for each pollution incident -**INCIDENT DETAILS** Ship's DATE and TIME LATITUDE LONGITUDE EEZ/HARBOUR N/S E/W ΥY MM $\mathsf{m}\mathsf{m}$ (ddmm.mmm') (dddmm.mmm') DD WIND DIRECTION WIND SPEED SEA CONDITIONS CURRENT: (knts and direction°) OBSERVER'S VESSEL ACTIVITY (C, S, M, R)NAME OF OFFENDING VESSEL YOUR POSITION FROM OFFENDING VESSEL **IRCS** TYPE OF VESSEL Compass Bearing Distance (nautical miles) WASTE DUMPED OVERBOARD Tick each box Material Describe Type **Describe Quantity** that applies **Plastics** Metals Waste oil Chemicals General garbage describe: (within 12 miles of shoreline) OIL SPILLAGES AND LEAKAGES Tick each box Source Visual Appearance / Colour Describe Area and Quantity that applies Vessel Aground / Collision Vessel at Anchor / Berth Vessel Underway Land based source - Describe source Other - please specifiy Abandoned or Lost Fishing Gear Source Activity Describe Gear **Estimate Quantity** Lost during fishing Abandoned

### MARPOL Regualations - state

Y / N

Y / N

Were there any stickers/ posters displayed to remind the vessel about MARPOL Regulations?

If yes, please state the number(s) of the photo frames or files.

Dumped

Other comments:

Did you take any photos?

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	amount as well as possible and make note that it is only a rough estimate at
	OIL SPILLAGES AND LEAKAGES
Source	Tick to indicate where the spillage or leak came from
Visual Appearance / Colour	Describe the colour/ thickness/depth of the spill as well as able.
Describe Area and Quantity	Give a best estimate of the size of the spill.
	The boat could be a size reference - e.g.: it was 4 times bigger than the boat.
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Describe Gear	monofilament branchline, no hooks
Estimate Quantifty	Refer to the total area in square meters. Mention the length, breadth and width.

# SPC/FFA REGIONAL OBSERVER POLLUTION REPORT

REVISED Dec. 2016

**FORM GEN-6** 

OBSERVE	RNAME				VES	VESSELNAME				OBSERVER ID NUMBER				PAGE	OF	
				£						ollution incident -						
INCIDE	NT DETA	AII S		- 11	III IN O	ne tor	m for e	<u>eacn</u> p	ollutio	on incid	ient -					
INCIDE	Ship's DA		ITIME		L	ATITUD	E	N/S	LONGITUDE E/W					EEZ/HAF	RBOUR	
YY	ММ	DD	hh	mm	(dd	mm.mm	m')		(dddmm.mmm')			•				
WIND D	DIRECTION		WIND SPI	EED		CONDIT C, S, M , F		CUR	CURRENT : (knts and direction °)			OBSERVER'S VESSEL ACTIVITY			VITY	
NA	ME OF OF	FENDIN	IG VESSEL		IR	CS	TYP	E OF VES	SSEL YOUR POSITION FROM OFFENDING VESSE Compass Bearing Distance (nautical mile							
						WAST	E DUMI	PED O\	/ERBO	ARD			L			
Material	Tick ead that ap			I	Describ	cribe Type				Describe Quantity						
Plastics																
Meta	Metals															
Wast	te oil															
Chem	ricals															
Gen																
garbage (within 12 miles describe:																
of shoreline) OIL SPILLAGES AND LEAKAGES																
Source	<u> </u>			Tick ea	ch box						Des	scrib	ne Area	and Q	 uantity	,
	ground /	Collis	ion	tnat ap	opiles	Visual Appearance										
	it Anchor															
Vessel L	Jnderway	,														
Land bas			escribe s	source												
Other - p																
					F	Abando	ned or	Lost F	ishing (	Gear						
	Sour	се		Act	ivity		Des	cribe (	Gear			Es	stimate	Quantit	ty	
Lost dur	ing fishir	ng														
Abandoned																
Dumped	I															
Other co.	mments:															
Were th	here anv	stick	kers/ no	sters	display	ved to	remin	d the	vessel	about	MARPO	DL F	Regular	tions?	Υ /	N N
Did you	_		_										-0*****		Υ /	
If yes, p	olease si	tate t	he num	ber(s)	of the	phot	o fram	es or	files.							

# MARPOL Regualations - state

It is illegal for any vessel to discard any form of plastics into the sea at anytime. It is illegal for any vessel to discard any form of oil into the sea less than 50 nautical miles (nm) from shore. It is illegal for any vessel to dump any form of rubbish into the sea within 12 nautical mile of the shore, unless the vessel has a machine on-board (comminuter) to shred and treat the waste. In this case they can release the treated garbage up to 3 nm from the shore.

## **POLLUTION REPORT**

Remember - Fill in one form for each pollution incident. There might be more than one per day. If forms run out, report this on the last form and continue recording pollution infringements in diary.

Observer Name	Dut East and Sept and Joseph Boards
<u> </u>	Put first name first, and your family name last.
Vessel Name	Record the full name of the vessel. Do not use any abbrevations.
Observer ID Number	Use the number assigned by the observer programme e.g. AA 03-01
Page of	Number all GEN-6 pages in sequence from the start until the end of the trip
Time (00.00 hrs)	Date pollution seen in year, month and day.  Report the time using the 24hr clock  Observer data collection forms
<u> </u>	Troport the time doing the 2 mil clock.
Latitude / Longitude EEZ / Harbour	Record the GPS position of the host vessel when the pollution was first seen.
<b></b>	Record the EEZ or, for shorebase staff, mark port or Harbour name here.
Wind Speed	The prevailing wind direction. Use degree eg. 90 degrees for an east wind
Wind Speed Sea Conditions	Record the prevailing wind speed.
<b></b>	C- Calm, S- Slight, M- Moderate, R - Rough.
Current (knts and direction)	If the vessel has a current meter find out what the current strength is.
	State the host (observer's) vessel activity at the time of the pollution incident.
Observer's vessel activity	Some activities to consider might be:
	fishing; transhipping; bunkering; transitting; aground.
	Make an effort to record the complete and proper name of offending vessel.
Name of offending vessel	Be careful not to make any spelling mistakes which may make it difficult to
	prosecute the vessel if the report goes through legal proceedings.
IRCS	The international callsign is marked in large letters on the side of the boat.
Type of vessel	Consider the full vessel and aircraft codes on the front of Form GEN-1.
Your positon from offending	Use the vessel compass to get direction of theoffending vessel from the obs.'
vessel.	vessel. The radar can be used to get an extact distance in nautical miles.
	Otherwise give your best estimate.
	WASTE DUMPED OVERBOARD  Tick the appropriate data field to show which types of materials were
***************************************	dumped. Only a maxium of two materials ifmore than one material type
Material	dumped over at the same time - e.g.: it dumped plastic and metal at
7000000	10:00hrs. If plastic was dumped at 10:00hrs and metal at 16:00hrs - record
	Give as good a description as possible of the type of dumped material.
Describe type	E.g.: - plastic bags; bait boxes plastic strapping; bait boxes plastic bags;
	Give a best estimate of the amount dumped. Sometimes this will be easy -
-	e.g., 12 metal oil drums were dumped. At other times the material might be
Describe Quantities	too far away to see the amount. If it is too far away then estimate the
***************************************	amount as well as possible and make note that it is only a rough estimate at
	OIL SPILLAGES AND LEAKAGES
Source	Tick to indicate where the spillage or leak came from
Visual Appearance / Colour	Describe the colour/ thickness/depth of the spill as well as able.
	Give a best estimate of the size of the spill.
Describe Area and Quantity	The boat could be a size reference - e.g.: it was 4 times bigger than the boat.
	Abandoned or Lost Fishing Gear
	There is no tick box. Indicate the source of the abandoned/ lost fishing gear by completing
Source	the information for the corresponding row of information. For instance if the source is 'lost
7	during fishing' fill in the activity, describe gear, and estimate quantity on the line to the right of 'lost during fishing'.
	Use this line if the gear was <u>accidentally</u> lost from the observer's vessel
Source - Lost during fishing	during this trip and the vessel tried to search and recover the gear.
200.00	Use this line if the gear was <u>deliberately</u> abandoned from the observer's
Source - Abandoned	vessel during the trip, or similarly the vessel made no effort to retrive the gear.
Cource - Abandoned	Use this line if the vessel deliberately dumped any fishing gear overboard
Source Dummed	(either old fishing gear, or some of the gear that was used during the trip).
Source - Dumped	
A - 45 54	Record your vessel's activity when gear was lost, abandoned or dumped.
Activity	This might be setting, hauling, steaming etc.  Given information on the goar, especially the type of materials it was made of
***************************************	Given information on the gear, especially the type of materials it was made of
Describe Gear	(e.g. aluminium, nylon rope) and its make up - fishing net 10cm mesh, old monofilament branchline, no hooks
Estimate Quantifty	Refer to the total area in square meters. Mention the length, breadth and width.
(Estimate Ciliantiff)	relet to the total area in square infeters. Werthor the length, breathi and width.

#### SPC/FFA REGIONAL OBSERVER **FORM GEN-6** POLLUTION REPORT VESSEL NAME OBSERVER ID NUMBER OBSERVER NAME PAGE OF - fill in one form for each pollution incident -**INCIDENT DETAILS** Ship's DATE and TIME LATITUDE LONGITUDE EEZ/HARBOUR E/W N/S ΥY ΜМ DD mm (ddmm.mmm') (dddmm.mmm') SEA CONDITIONS WIND DIRECTION WIND SPEED CURRENT: (knts and direction°) OBSERVER'S VESSEL ACTIVITY (C, S, M, R)NAME OF OFFENDING VESSEL IRCS TYPE OF VESSEL YOUR POSITION FROM OFFENDING VESSEL Compass Bearing Distance (nautical miles) WASTE DUMPED OVERBOARD Tick each box Material Describe Type **Describe Quantity** that applies **Plastics** Metals Waste oil Chemicals General garbage describe: (within 12 miles of shoreline) **OIL SPILLAGES AND LEAKAGES** Tick each box Source Visual Appearance / Colour Describe Area and Quantity that applies Vessel Aground / Collision Vessel at Anchor / Berth Vessel Underway Land based source - Describe source Other - please specifity Abandoned or Lost Fishing Gear

Source	Activity	Describe Gear	Estimate Quantity
Lost during fishing			
Abandoned			
Dumped			
Other comments:		_	

Were there any stickers/posters displayed to remind the vessel about MARPOL Regulations? Did you take any photos?

Y / N Y / N

If yes, please state the number(s) of the photo frames or files.

### MARPOL Regualations - state

It is illegal for any vessel to discard any form of plastics into the sea at anytime. It is illegal for any vessel to discard any form of oil into the sea less than 50 nautical miles (nm) from shore.  $\,$  It is illegal for any vessel to dump any form of rubbish into the sea within 12 nautical mile of the shore, unless the vessel has a machine on-board (comminuter) to shred and treat the waste. In this case they can release the treated garbage up to 3 nm from the shore.

### **POLLUTION REPORT**

Remember - Fill in one form for each pollution incident. There might be more than one per day. If forms run out, report this on the last form and continue recording pollution infringements in diary.

Observer Name	Put first name first, and your family name last.			
Vessel Name	Record the full name of the vessel. Do not use any abbrevations.			
Observer ID Number	Use the number assigned by the observer programme e.g. AA 03-01			
Page of	Number all GEN-6 pages in sequence from the start until the end of the trip			
Date of Incident ( yy / mm /dd	Date pollution seen in year, month and day. Use ship's time as defined in other			
Time (00.00 hrs)	Report the time using the 24hr clock.  observer data collection forms			
Latitude / Longitude	Record the GPS positon of the host vessel when the pollution was first seen.			
EEZ / Harbour	Record the EEZ or, for shorebase staff, mark port or Harbour name here.			
Wind Direction	The prevailing wind direction. Use degree eg. 90 degrees for an east wind			
Wind Speed	Record the prevailing wind speed.			
Sea Conditions	C- Calm, S- Slight, M- Moderate, R - Rough.			
Current (knts and direction)	If the vessel has a current meter find out what the current strength is.			
	State the host (observer's) vessel activity at the time of the pollution incident.			
Observer's vessel activity	Some activities to consider might be:			
7000000	fishing; transhipping; bunkering; transitting; aground.			
	Make an effort to record the complete and proper name of offending vessel.			
Name of offending vessel	Be careful not to make any spelling mistakes which may make it difficult to			
3	prosecute the vessel if the report goes through legal proceedings.			
IRCS	The international callsign is marked in large letters on the side of the boat.			
Type of vessel	Consider the full vessel and aircraft codes on the front of Form GEN-1.			
	Use the vessel compass to get direction of theoffending vessel from the obs.			
Your positon from offending	vessel. The radar can be used to get an extact distance in nautical miles.			
vessel.	Otherwise give your best estimate.			
	WASTE DUMPED OVERBOARD			
	Tick the appropriate data field to show which types of materials were			
B. G. C.	dumped. Only a maxium of two materials ifmore than one material type			
Material	dumped over at the same time - e.g.: it dumped plastic and metal at			
	10:00hrs. If plastic was dumped at 10:00hrs and metal at 16:00hrs - record			
Describe type	Give as good a description as possible of the type of dumped material.			
Describe type	E.g.: - plastic bags; bait boxes plastic strapping; bait boxes plastic bags;			
	Give a best estimate of the amount dumped. Sometimes this will be easy -			
Describe Quantities	e.g., 12 metal oil drums were dumped. At other times the material might be			
Describe Quantities	too far away to see the amount. If it is too far away then estimate the			
	amount as well as possible and make note that it is only a rough estimate at			
	OIL SPILLAGES AND LEAKAGES			
Source	Tick to indicate where the spillage or leak came from			
Visual Appearance / Colour	Describe the colour/ thickness/depth of the spill as well as able.			
Describe Area and Oversity	Give a best estimate of the size of the spill.			
Describe Area and Quantity	The boat could be a size reference - e.g.: it was 4 times bigger than the boat.			
	Abandoned or Lost Fishing Gear			
	There is no tick box. Indicate the source of the abandoned/ lost fishing gear by completing			
Source	the information for the corresponding row of information. For instance if the source is 'lost during fighing' fill in the activity, describe goar, and estimate quantity on the line to the right			
	during fishing' fill in the activity, describe gear, and estimate quantity on the line to the right of 'lost during fishing'.			
	Use this line if the gear was <u>accidentally</u> lost from the observer's vessel			
Source - Lost during fishing	during this trip and the vessel tried to search and recover the gear.			
	Use this line if the gear was <u>deliberately</u> abandoned from the observer's			
Source - Abandonad	vessel during the trip, or similarly the vessel made no effort to retrive the gear.			
Source - Abandoned				
Source Dummed	Use this line if the vessel deliberately dumped any fishing gear overboard (either old fishing gear, or some of the gear that was used during the trip).			
Source - Dumped				
	Record your vessel's activity when gear was lost, abandoned or dumped.			
Activity	This might be setting, hauling, steaming etc.			
***************************************	Given information on the gear, especially the type of materials it was made of			
Describe Gear	(e.g. aluminium, nylon rope) and its make up - fishing net 10cm mesh, old monofilament branchline, no hooks			
Estimate Quantifty	Refer to the total area in square meters. Mention the length, breadth and width.			

# SPC/FFA REGIONAL OBSERVER TRIP RECONCILIATION

FORM SUP-3

REV. Dec 2016							
OBSERVER NAME	VESSEL NAME	VESSEL CALL-SIGN	OBSERVER TRIP ID No.				

	TRAVEL DETAILS								
EVENT	DEPARTURE					ACTIV- ITY	DAYS	COMMENTS	
CODE	PLACE OR VESSEL	DATE	TIME	PLACE OR VESSEL	DATE	TIME	CODE	DATO	COMMENTO

# ALL DETAILS TO BE FILLED OUT IN A CHRONOLGICAL ORDER

# **EVENT CODES**

## **ACTIVITY CODES**

EVENT GODEG		ACTIVITY CODEC				
Observer boards plane	BP	Air Flight	AF			
Observer boards ferry	BF	Ferry Trip	FT			
Observer arrives in stopover port or town	OS	Observer stopover travelling to or from vessel	SO			
Observer arrives in port for start of trip	OA	Observer waiting for vessel departure on shore	OW			
Observer boards vessel	BV	Observer transiting home after trip				
Vessel departs port with observer	VD	Vessel in Port (observer onboard)				
Vessel arrives in port with observer	VA	Vessel at Sea (observer on board)	VS			
Observer disembarks vessel	DV					
Observer transfers to a different vessel	OT	Other (describe in comments)	OR			



#### SPC/FFA REGIONAL OBSERVER **FORM** SUP-4 **ADVANCES and CLAIMS FORM** REV DEC. 2016 OBSERVER NAME VESSEL NAME **IRCS** PAGE **ADVANCES** Advance Claim SIGNATURE State TYPE of NAME OF OBSERVER Ref No. Curr-NAME OF PERSON (of person PROGRAMME or FISHING ADVANCE (i.e. Amount **ADV Observer Trip** PROVIDING ADVANCE making ency **COMPANY MAKING ADVANCE** cash /other) ID No # advance) 1 2 3 4 5 6 7 8 9 10 **OBSERVER EXPENSE CLAIMS FOR REIMBURSEMENT** Claim item [number (#) each receipt] Claim item [number (#) each receipt] Curr-Curr-Amount Amount ency ency EXP# Description # Description 1 13 2 14 3 15 4 16 5 17 6 18 7 19 8 20 9 21 10 22 11 23 12 24 one box only: Please make payments to: (payee's name) observer's signature (branch) (bank) (account number) Tick Please arrange for funds to be available on presentation of passport Written report and ..... (hand caried, courier, express mail, etc.) On (date) data was sent by: ed mail

I certify that the expense claims and dates of travel and sea days are a true account of expenses and dates of travel; and I verify that my independent report and data collection is a true and correct record of my observations onboard the vessel

SIGNED: Date:

New for 2016: All advances received by an observer must be filled in on this form.

Advances will not be reimbursed unless the advances are fully documented on this form and signed off.

	ADVANCES
Reference	The advance claim reference number is a mixture of a 'claim' number and the observer trip id number. Combined these numbers help to uniquely identify each observer advance so it can be reimbursed to the person that made the advance. In the future advances will not be reimbursed if they don't have the advance claim reference number. It is important that you notify the person making the advance of the number and get them to sign the form. See below. If possible make sure they get a photcopy of the form after they have signed it. Example of an advance claim reference number: ADV #1: ELE 15-07
NAME OF OBSERVER PROGRAMME or FISHING COMPANY MAKING ADVANCE	State the name of the observer programme or the fishing company that provided the advance. You should include the full contact details for the fishing company in your journal. Remember to record the full mailing address and the email and phone number in the journal.
FULL NAME OF PERSON PROVIDING THE ADVANCE	Clearly record the full name of the person that gave you the advance.
(of person making	You must get the signature of the person who made the advance. In future the person or their observer programme or fishing company will not be paid back the advance if this form is not filled in. If the advance was sent from overseas your Observer Coordinator must sign the form.
TYPE OF ADVANCE	State if you received cash, traveller's check or a bank transfer.
CURRENCY	State the currency that was received (i.e US for US dollars, YEN for Japanese yen, FJ for Fijian dollars etc)
AMOUNT	State the amount that was received in figures to two decimal places.

### **OBSERVER EXPENSE CLAIMS FOR REIMBURSEMENT**

- 1. All receipts should be dated and have the name of the company clearly indicated. A cash register receipt must be clear and have the item purchased listed on the receipt if this is not available ask for a hand written receipt with company name on the receipt. Remember to record what the currency is on each receipt.
- 2. If no receipts are available (e.g. taxis) list these items on a sheet with full details, dates and currency and sign the sheet.
- 3. Make sure all claim receipts are numbered and are placed in a separate envelope along with used and/or unused airline tickets. Send the envelope with work books. <a href="https://www.numbered.numbered">unused airline tickets</a>. Send the envelope with work books. <a href="https://www.numbered.numbered.numbered">unused airline tickets</a>. Send the envelope with work books. <a href="https://www.numbered.numb
- 4. Observers are able to claim work related taxi/bus fares, airport tax, safety deck boots, helmets, etc.

  If you are not sure if you can make a claim for an item, put a claim in and your coordinator will assess the claim.
- 5. Safely package (preferably in a padded envelope) data and workbooks, the envelope containing receipts, photographs and/or any other items and make sure they are hand carried, sent by Courier, or sent by Express Registered Air-Mail. Normal or surface mail can take months and will delay final payment. All costs of sending the packages by courier or express mail are refundable.
- UNDER NO CIRCUMSTANCE MAIL THESE ARTICLES BY NORMAL OR SURFACE MAIL
   Fax a copy of this form to your main office or as advised by your coordinator. Send the original copy with the
   receipts
- 7. Although DSA (per diem / travel and accomodation allowances) cover accommodation copies of hotel/motel receipts that show clearly the dates stayed, must be sent in. Do not send in receipts for food purchases or personal items.

# FOR TAGS RECOVERED ON BOARD DURING YOUR TRIP, EVEN IF YOU ARE NOT THE FINDER, THE RECOVERY INFORMATION MUST BE RECORDED IN YOUR WORKBOOK.

## DO NOT REMOVE THE FORM FROM YOUR WORKBOOK! BUT PROVIDE A COPY OF THE INFORMATION TO THE FINDER.

(either by using the tag recovery envelopes or by copying the data on another paper or forms)

What do you do if you find a tagged fish during fishing time?

- Ask permission to put the fish aside.
- Verify that there is no archival tag in the belly. You should be able to see the antenna of the archival tag sticking out. Remove the archival tag by cutting the fish from the anus toward the gills (a small cut will be enough, do not pull the antenna).
- Measure the fish. If possible weigh the fish.
- Remove entirely the tag from the fish. Make sure that the dart doesn't remain inside the flesh of the fish.
- Fill in the tag recovery form and report the exact date and position of the catch.
- If you have access to a freezer, you can collect biological samples (otoliths, first dorsal spine, stomach, gonads, muscle, liver)

What do you do if you find a tagged fish during a well transfer or during transhipment?

- Ask permission to put the fish aside.
- Note the well number and tag number.
- Verify that there is no archival tag in the belly. You should be able to see the antenna of the archival tag sticking out. Remove the archival tag by cutting the fish from the anus toward the gills (a small cut will be enough, do not pull the antenna).
- Measure the fish. If possible weigh the fish.
- Remove entirely the tag from the fish. Make sure that the dart doesn't remain inside the flesh of the fish.
- Fill in the tag recovery form and if there were several sets in the well, report the period and the position that include all the sets.
- If you have access to a freezer, you can collect biological samples (otoliths, first dorsal spine, stomach, gonads, muscle, liver)

What do you do if the crew gives you a tag?

- Ask when they found the tagged fish and all possible questions to recover information relative to the recovery. If the date when the tag was found is not precise you can at least enter the month and the year of the catch.
- If the catch position cannot be retrieved, try to at least describe the region where the tagged fish was caught.
- If the crew gives you an approximate date, try to access the vessel's logbook to find out where the boat was around that date and use the estimate section of the form to report the position.
- If the tag was traded and the tagged fish was recaptured by another fishing vessel that the one you are observing on, please note the information in the general comment section of the form.
- Note all the recovery information in your workbook, provide a copy to the finder (report data on another form, or tag recovery envelope). Do not take the tag from the finder.
- On your tag recovery form, in the section 'Tag provided with this form' place a cross in 'No' and specify where the crew will collect his reward.
- Upon Arrival at port you can provide assistance to the crew to collect his reward.

Rewards

In each main port you can find a Tag Recovery Officer (TRO), they are able to distribute reward for recovered tags.

If a crew member on the boat finds a tag, fill out the tag recovery form with him and give the tag back to the finder with a copy of the data and advise him where to collect his reward in the next major port.

Tag recoveries may also be reported to SPC by email (tagging@spc.int), or on a web-based form at: www.spc.int/tagging

You can inform the captain and the crew that they can use the website if they recover tags in the future. Observers must always use the recovery forms in the workbook to report tag recoveries. At the end of the trip if you have extra forms, you can remove them from your workbook and provide them to the captain.



For advices contact the Tagging Recovery Officer Coordinator: Caroline Sanchez - Carolines@spc.int /(+687 242227)

Reward Collection Locations

#### American Samoa

 CIFFO – Cook Island Field Fisheries Office PAGO PAGO (Contact: Lyndsay Mundri)

#### China

 China Fisheries Association, BEIJING (Contact: Zhao Gang)

 Ningbo Poseidon Food Company NINGBO (Contact: Shirley Chen)

#### **Cook Islands**

 Ministry of Marine Resources RAROTONGA (Contact: Andrew Jones)

#### **Ecuador**

 Inter American Tropical Tuna Commission IATTC/CIAT in MANTA (Contact: Erick Largacha)

#### **Federated States of Micronesia**

- Secretariat of the Pacific Community POHNPEI (Contact: Amelia Antreas)
- National Oceanic Resource Management Authority POHNPEI (Contact: Derek Pelep)

#### Fiji

 Secretariat of the Pacific Community SUVA (Contact: Front Office)

#### Guam

 Guam Fishermen's Cooperative Association GUAM (Contact: Manuel Duenas)

#### Indonesia

 Research Centre for Capture Fisheries, JAKARTA (Contact: Anung Widodo)

## Japan

 National Research Institute of Far Seas Fisheries SHIMIZU (Contact: Junji Kinoshita)

#### Kiribati

- Ministry of Fisheries & Marine Resource Development, Bairiki TARAWA (Contact: Mamera Afeleti / Benaia Bauro / Tataua Rabunataai)
- 2. Ministry of Fisheries & Marine Resource Development, CHRISTMAS ISLAND (Contact: Taratau Kirata)

#### Korea

1. National Fisheries Research and Development Institute BUSAN (Contact: Seon Jae Wang (황선재)

#### **Marshall Islands**

 Marshall Islands Marine Resources Authority MAJURO (Contact: Berry Muller/Mark Bigler)

#### New Caledonia

 Secretariat of the Pacific Community NOUMEA (Contact: Caroline Sanchez)

#### Palau

 Bureau of Marine Resources KOROR (Contact: Kathy Sisior)

#### Papua New Guinea

- National Fisheries Authority PORT MORESBY (Contact: Benthly Sabub)National Fisheries Authority LAE (Contact: Walter Rupo / Billy Pangi)
- 2. Frabelle PNG LAE (Contact: Celia Batobato)
- 3. National Fisheries Authority MADANG (Contact: Clement Kuag)
- 4. RD Fishing PNG VIDAR (Contact: Sammy Rivera)
- National Fisheries Authority WEWAK (Contact: Andrew Rahiria)
- South Sea Tuna Corporation WEWAK (Contact: Eldwin Umusig)
- National Fisheries Authority RABAUL (Contact: Ellison Semi / Ezekiel Pue)

#### Palau

 Bureau of Marine Resources KOROR (Contact: Kathy Sisior)

#### **Philippines**

- Bureau of Fisheries & Aquatic Resources MANILA (Contact: Noel Barut / Elaine Garvilles)
- Bureau of Fisheries & Aquatic Resources GENERAL SANTOS (Contact: Glennville Castrence / Ian Medel Lipio)
- 3. Bureau of Fisheries & Aquatic Resources DAVAO (Contact: Front Office)

#### Seychelles

 Indian Ocean Tuna Commission SEYCHELLES (Contact: Julien Million)

#### Solomon Islands

- Ministry of Fisheries & Marine Resources HONIARA (Contact: Derrick Tagosia / Harold Vilia)
- 2. Forum Fisheries Agency HONIARA (Contact: Ambrose Orianihaa)
- 3. Soltai Fishing NORO (Contact: Solomon Kakana)
- 4. Ministry of Fisheries & Marine Resources NORO (Contact: Derick Suimae)

#### Taiwan

1. Taiwan Deep Sea Tuna Purse Seiners Association KAOHSIUNG

(Contact: Jason Tsai )

 Overseas Fisheries Development Council KAOHSIUNG (Contact: Peter Ho (何勝初)

#### Thailand

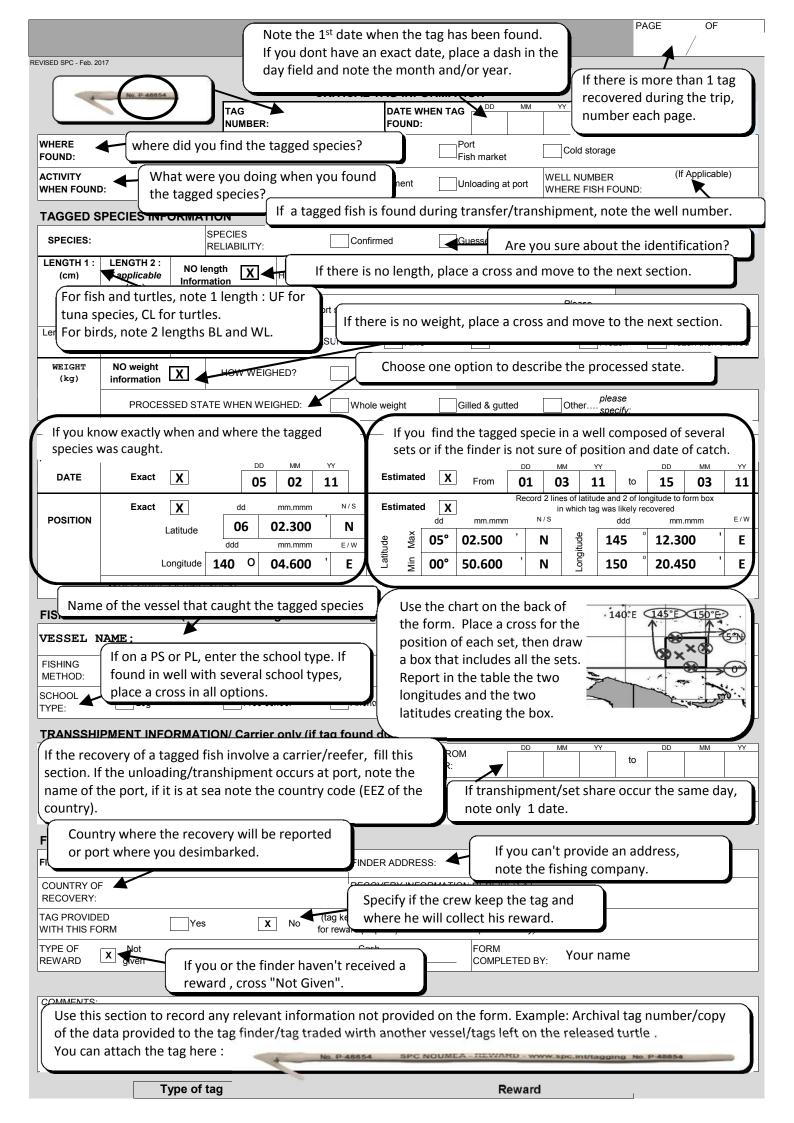
 Thailand Department of Fisheries, SAMUTSAKOM (Contact: Suwimon Keerativiriyaporn)

#### **United States of America**

- Inter American Tropical Tuna Commission SAN DIEGO (Contact: Dan Fuller)
- National Oceanic and Atmospheric Administration HONOLULU (Contact: David Itano)

#### Vietnam

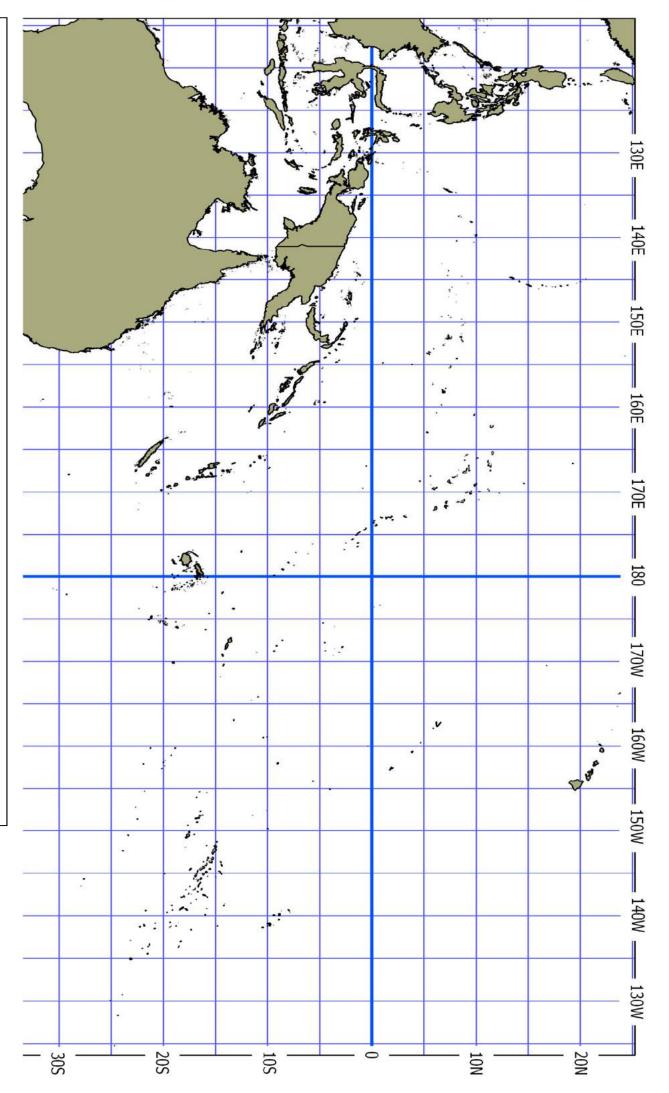
- 1. Phu Yen Province (Contact: Le Duc Tuong)
- 2. Binh Dinh Province (Contact: Nguyen Duy Lam)
- 3. Khanh Hoa Province (Contact: Vo Khac En)



## HOW TO FILL THE MULTIPLE TAG RECOVERY FORM

		RECOVERY FORM Indicate if you have more than 1 series of multiple tag recoveries.
Where did y the tagged fi	ish?	DATE WHEN TAG FOUND: 26 08 11 Note the date when the tags were first found. If you don't have an exact date, place a dash in
WHERE FOUND:	X Fishing vessel	Reefer / Transfer / the day field and note the month and/or year.
ACTIVITY WHEN FOUND:	X Fishing	What were you doing when you found the tagged fish? (If Applicable) where FISH FOUND:
TAG NUMBER:		SPECIES: X SKJ BET YFT G the number and position (Eg; S2 for
FORK LENGTH	NO length Information	Select the species code imated HOW Select the species code imated HOW WEIGHED?  Measuring Lestimated FRC WHOW WEIGHED?  Measuring Lestimated WW Well from your logbook.
TAG NUMBER:	P-234587	SPECIES: SKJ BET YFT Other please Specify: DENTIFICATION: Guess
FORK <b>LENGTH</b> cm	NO length Information	HOW MEASURED? Measuring Estimated PROC Are you sure about the identification?
FISH <b>WEIGHT</b> Kg	NO weight information	HOW WEIGHED? Measuring Estimated PROCESSED STATE Whole Gilled & Other.
TAG NUMBER:		SPECIES: SKJ BET YFT Other please specify: DENTIFICATION: Guess
FORK LENGTH	Note the size of	the fish, round down to the nearest cm (Eg: 65.7cm=65
1.8 Kg	Note the exact	weight of the fish (Eg: 1.8 kg).  PROCESSED STATE Select 'Fresh' for a tagged fish caught during fishing time.
measured v	ize and weight with an or estimated?	CIES: SKJ BET YFT Other please specify:  WMEASURED? Measuring Lestimated WHEN MEASURED:  Select 'Frozen' if found during well transfer/unloading.
FISH WEIGHT	NO weight information	HOW WEIGHED? Measuring Estimated PROCESSED STATE Whole Gilled & Other.
TAG NUMBER:		Select the processed state  Select the processed state of the fish when weighed.
FORK LENGTH cm	NO length Information	If there is no length, place a cross and move to the next section.
FISH <b>WEIGHT</b> Kg	NO weight information	If there is no weight, place a cross and move to the next section.
TAG NUMBER:	P-195236	SPECIES: X SKJ BET YFT Other please specify: DENTIFICATION: Guesse
FORK LENGTH 46 cm	NO length Information	HOW MEASURED? X Measuring tool Estimated PROCESSED STATE WHEN MEASURED: Frozen
FISH WEIGHT  1 Kg	NO weight information	HOW WEIGHED?    Measuring tool   PROCESSED STATE WHEN Weight   Gilled & gutted   Other
TAG NUMBER:	P-278564	SPECIES: SKJ BET X YFT Other please specify: DENTIFICATION: X Confirmed Guesse
FORK LENGTH  85 cm	NO length Information	HOW MEASURED? X Measuring Lestimated PROCESSED STATE WHEN MEASURED: Frozen
FISH WEIGHT 5.9 Kg	NO weight information	HOW WEIGHED?    Measuring   Estimated   PROCESSED STATE WHEN   Whole   Weight   Gilled & Butted   Other
	le tag recovery er from the <u>sam</u>	E AND HOW TO COMPLETE THE MULTIPLE TAG RECOVERY FORM form is meant to be used when a finder recovers up to 8 tagged fish the same e set during fishing time or from the same well during transfer or unloading. Tishery information must be filled at the back of the form

Note that each fish has a different tag number, they can be different species, the size and weight can be different.



Please use this map of the Pacific Ocean with a grid of 5 squares to determine where the tagged species has been caught (Point or area)

If you have several dates and positions corresponding to sets, plot the latitude and longitude of all the sets (make a cross where each set has been deployed). Write down the set number and the date next to the set position (cross). Draw a box which includes all the sets and record the maximum and minimum latitute and longitude on the first page.

Email: tagging@spc.int
Website: www.spc.int/tagging

		SINGLE '	TAG RECO	VERY FORM	Λ	PAGE OF				
EVISED SPC - Feb. 201	7	CRI	TICAL TAG INFO	RMATION		,				
		TAG NUMBER:	DATE WH FOUND:	VV MM	DD					
WHERE FOUND:	Fishing	Reefe	/ Transfer /	Port Fish market	Cold storage					
ACTIVITY WHEN FOUND:	Fishing	Well transfer	Transhipment	Unloading at port	WELL NUMBER WHERE FISH FOUN	(If Applicable)				
TAGGED SF	TAGGED SPECIES INFORMATION									
SPECIES:		CIES IABILITY:	Confirmed	Guessed						
LENGTH 1 : (cm)	LENGTH 2 : if applicable (cm)  NO length Information	HOW MEASUR	RED?	Measuring tool Es	timated					
	WHO MEAS	URED? Port sa	ampler C	bserver Ot	Please her specify:					
Length 1 code:	Length 2 code: PROCESS	ED STATE WHEN MEASUR	RED: Alive	Fresh and o		Frozen then thawed				
WEIGHT: (kg)	NO weight Information	W WEIGHED?	Measuring tool	Estimated						
	PROCESSED STATE WHEN	I WEIGHED:	Whole weight	Gilled & gutted	Other please specify:					
TAGGED SF	PECIES CATCH INFOR	MATION / Date and p	osition when ta	gged species was o	aught by the fish	ning vessel				
DATE	Exact	YY MM DD	Estimated	From YY	MM DD to	YY MM DD				
	Exact		N/S Estimated		in which tag was likel					
POSITION	Latitude	- '	Wax ude	dd mm.mmm	N/S ddd	mm.mmm E/W				
	Longitude	ddd mm.mmm	Latitude Min Max	0 ,	Longitude	0 ,				
	or DESCRIBE FISHING ARE	EA (If NO Lattitude and longit	_							
FISHERY IN	FORMATION (Catcher	· / Fishing vessel that	caugth the tag	ged species)						
VESSEL NAME	:	-	F	LAG:						
FISHING METHOD:	Longline	Purse seine	Troll	Handline	Gill net Othe	r:				
SCHOOL TYPE:	Log	Free school	Anchored FAD	Drifting FAD	FAD no:					
TRANSSHIP	MENT INFORMATION	/ Carrier only (fill this	section only if tag	-	_					
NAME OF CARRIER:		FLA(4.	OF TRANSSHIPMEN NG VESSEL TO CAR		MM DD to	O MM DD				
	TRANSSHIPMENT VESSEL TO CARRIER	TRAN POSIT	ratitude tuments	dd mm.mmm	Ppp Longitude s/k	mm.mmm E/W				
FINDER INF	ORMATION / finder de	etails for lottery								
FINDER NAME			FINDER ADDRESS	S:						
COUNTRY OF RECOVERY:				RMATION RECEIVED AT/ y/Agency name/vessel name						
TAG PROVIDEI WITH THIS FOR	YAS	1 100	, ,	, specify expected reward on for finder (Port/Country)	:					
TYPE OF REWARD:	Not T-shirt	Сар	Cash - amount:	FORM COMPLETED E	Y:					
COMMENTS:	IF A TAC	GGED TURTLE / TAGGED E	BIRD WAS RELEASE	D ALIVE, DID YOU LEAVE	THE TAGS ON ? Spe	cify below.				
ARCHIVAL TA	G NUMBER (If applicable):									
	Type of tag	Orange tag or Green ta	20	Reward	l Cap or T-shirt	]				

		SINGLE '	TAG RECO	VERY FORM	Λ	PAGE OF				
EVISED SPC - Feb. 201	7	CRI	TICAL TAG INFO	RMATION		,				
		TAG NUMBER:	DATE WH FOUND:	VV MM	DD					
WHERE FOUND:	Fishing	Reefe	/ Transfer /	Port Fish market	Cold storage					
ACTIVITY WHEN FOUND:	Fishing	Well transfer	Transhipment	Unloading at port	WELL NUMBER WHERE FISH FOUN	(If Applicable)				
TAGGED SF	TAGGED SPECIES INFORMATION									
SPECIES:		CIES IABILITY:	Confirmed	Guessed						
LENGTH 1 : (cm)	LENGTH 2 : if applicable (cm)  NO length Information	HOW MEASUR	RED?	Measuring tool Es	timated					
	WHO MEAS	URED? Port sa	ampler C	bserver Ot	Please her specify:					
Length 1 code:	Length 2 code: PROCESS	ED STATE WHEN MEASUR	RED: Alive	Fresh and o		Frozen then thawed				
WEIGHT: (kg)	NO weight Information	W WEIGHED?	Measuring tool	Estimated						
	PROCESSED STATE WHEN	I WEIGHED:	Whole weight	Gilled & gutted	Other please specify:					
TAGGED SF	PECIES CATCH INFOR	MATION / Date and p	osition when ta	gged species was o	aught by the fish	ning vessel				
DATE	Exact	YY MM DD	Estimated	From YY	MM DD to	YY MM DD				
	Exact		N/S Estimated		in which tag was likel					
POSITION	Latitude	- '	Wax ude	dd mm.mmm	N/S ddd	mm.mmm E/W				
	Longitude	ddd mm.mmm	Latitude Min Max	0 ,	Longitude	0 ,				
	or DESCRIBE FISHING ARE	EA (If NO Lattitude and longit	_							
FISHERY IN	FORMATION (Catcher	· / Fishing vessel that	caugth the tag	ged species)						
VESSEL NAME	:	-	F	LAG:						
FISHING METHOD:	Longline	Purse seine	Troll	Handline	Gill net Othe	r:				
SCHOOL TYPE:	Log	Free school	Anchored FAD	Drifting FAD	FAD no:					
TRANSSHIP	MENT INFORMATION	/ Carrier only (fill this	section only if tag	-	_					
NAME OF CARRIER:		FLA(4.	OF TRANSSHIPMEN NG VESSEL TO CAR		MM DD to	O MM DD				
	TRANSSHIPMENT VESSEL TO CARRIER	TRAN POSIT	ratitude tuments	dd mm.mmm	Ppp Longitude s/k	mm.mmm E/W				
FINDER INF	ORMATION / finder de	etails for lottery								
FINDER NAME			FINDER ADDRESS	S:						
COUNTRY OF RECOVERY:				RMATION RECEIVED AT/ y/Agency name/vessel name						
TAG PROVIDEI WITH THIS FOR	YAS	1 100	, ,	, specify expected reward on for finder (Port/Country)	:					
TYPE OF REWARD:	Not T-shirt	Сар	Cash - amount:	FORM COMPLETED E	Y:					
COMMENTS:	IF A TAC	GGED TURTLE / TAGGED E	BIRD WAS RELEASE	D ALIVE, DID YOU LEAVE	THE TAGS ON ? Spe	cify below.				
ARCHIVAL TA	G NUMBER (If applicable):									
	Type of tag	Orange tag or Green ta	20	Reward	l Cap or T-shirt	]				

		SINGLE '	TAG RECO	VERY FORM	Λ	PAGE OF				
EVISED SPC - Feb. 201	7	CRI	TICAL TAG INFO	RMATION		,				
		TAG NUMBER:	DATE WH FOUND:	VV MM	DD					
WHERE FOUND:	Fishing	Reefe	/ Transfer /	Port Fish market	Cold storage					
ACTIVITY WHEN FOUND:	Fishing	Well transfer	Transhipment	Unloading at port	WELL NUMBER WHERE FISH FOUN	(If Applicable)				
TAGGED SF	TAGGED SPECIES INFORMATION									
SPECIES:		CIES IABILITY:	Confirmed	Guessed						
LENGTH 1 : (cm)	LENGTH 2 : if applicable (cm)  NO length Information	HOW MEASUR	RED?	Measuring tool Es	timated					
	WHO MEAS	URED? Port sa	ampler C	bserver Ot	Please her specify:					
Length 1 code:	Length 2 code: PROCESS	ED STATE WHEN MEASUR	RED: Alive	Fresh and o		Frozen then thawed				
WEIGHT: (kg)	NO weight Information	W WEIGHED?	Measuring tool	Estimated						
	PROCESSED STATE WHEN	I WEIGHED:	Whole weight	Gilled & gutted	Other please specify:					
TAGGED SF	PECIES CATCH INFOR	MATION / Date and p	osition when ta	gged species was o	aught by the fish	ning vessel				
DATE	Exact	YY MM DD	Estimated	From YY	MM DD to	YY MM DD				
	Exact		N/S Estimated		in which tag was likel					
POSITION	Latitude	- '	Wax ude	dd mm.mmm	N/S ddd	mm.mmm E/W				
	Longitude	ddd mm.mmm	Latitude Min Max	0 ,	Longitude	0 ,				
	or DESCRIBE FISHING ARE	EA (If NO Lattitude and longit	_							
FISHERY IN	FORMATION (Catcher	· / Fishing vessel that	caugth the tag	ged species)						
VESSEL NAME	:	-	F	LAG:						
FISHING METHOD:	Longline	Purse seine	Troll	Handline	Gill net Othe	r:				
SCHOOL TYPE:	Log	Free school	Anchored FAD	Drifting FAD	FAD no:					
TRANSSHIP	MENT INFORMATION	/ Carrier only (fill this	section only if tag	-	_					
NAME OF CARRIER:		FLA(4.	OF TRANSSHIPMEN NG VESSEL TO CAR		MM DD to	O MM DD				
	TRANSSHIPMENT VESSEL TO CARRIER	TRAN POSIT	ratitude tuments	dd mm.mmm	Ppp Longitude s/k	mm.mmm E/W				
FINDER INF	ORMATION / finder de	etails for lottery								
FINDER NAME			FINDER ADDRESS	S:						
COUNTRY OF RECOVERY:				RMATION RECEIVED AT/ y/Agency name/vessel name						
TAG PROVIDEI WITH THIS FOR	YAS	1 100	, ,	, specify expected reward on for finder (Port/Country)	:					
TYPE OF REWARD:	Not T-shirt	Сар	Cash - amount:	FORM COMPLETED E	Y:					
COMMENTS:	IF A TAC	GGED TURTLE / TAGGED E	BIRD WAS RELEASE	D ALIVE, DID YOU LEAVE	THE TAGS ON ? Spe	cify below.				
ARCHIVAL TA	G NUMBER (If applicable):									
	Type of tag	Orange tag or Green ta	20	Reward	l Cap or T-shirt	]				

		SINGLE '	TAG RECO	VERY FORM	Λ	PAGE OF				
EVISED SPC - Feb. 201	7	CRI	TICAL TAG INFO	RMATION		,				
		TAG NUMBER:	DATE WH FOUND:	VV MM	DD					
WHERE FOUND:	Fishing	Reefe	/ Transfer /	Port Fish market	Cold storage					
ACTIVITY WHEN FOUND:	Fishing	Well transfer	Transhipment	Unloading at port	WELL NUMBER WHERE FISH FOUN	(If Applicable)				
TAGGED SF	TAGGED SPECIES INFORMATION									
SPECIES:		CIES IABILITY:	Confirmed	Guessed						
LENGTH 1 : (cm)	LENGTH 2 : if applicable (cm)  NO length Information	HOW MEASUR	RED?	Measuring tool Es	timated					
	WHO MEAS	URED? Port sa	ampler C	bserver Ot	Please her specify:					
Length 1 code:	Length 2 code: PROCESS	ED STATE WHEN MEASUR	RED: Alive	Fresh and o		Frozen then thawed				
WEIGHT: (kg)	NO weight Information	W WEIGHED?	Measuring tool	Estimated						
	PROCESSED STATE WHEN	I WEIGHED:	Whole weight	Gilled & gutted	Other please specify:					
TAGGED SF	PECIES CATCH INFOR	MATION / Date and p	osition when ta	gged species was o	aught by the fish	ning vessel				
DATE	Exact	YY MM DD	Estimated	From YY	MM DD to	YY MM DD				
	Exact		N/S Estimated		in which tag was likel					
POSITION	Latitude	- '	Wax ude	dd mm.mmm	N/S ddd	mm.mmm E/W				
	Longitude	ddd mm.mmm	Latitude Min Max	0 ,	Longitude	0 ,				
	or DESCRIBE FISHING ARE	EA (If NO Lattitude and longit	_							
FISHERY IN	FORMATION (Catcher	· / Fishing vessel that	caugth the tag	ged species)						
VESSEL NAME	:	-	F	LAG:						
FISHING METHOD:	Longline	Purse seine	Troll	Handline	Gill net Othe	r:				
SCHOOL TYPE:	Log	Free school	Anchored FAD	Drifting FAD	FAD no:					
TRANSSHIP	MENT INFORMATION	/ Carrier only (fill this	section only if tag	-	_					
NAME OF CARRIER:		FLA(4.	OF TRANSSHIPMEN NG VESSEL TO CAR		MM DD to	O MM DD				
	TRANSSHIPMENT VESSEL TO CARRIER	TRAN POSIT	ratitude tuments	dd mm.mmm	Ppp Longitude s/k	mm.mmm E/W				
FINDER INF	ORMATION / finder de	etails for lottery								
FINDER NAME			FINDER ADDRESS	S:						
COUNTRY OF RECOVERY:				RMATION RECEIVED AT/ y/Agency name/vessel name						
TAG PROVIDEI WITH THIS FOR	YAS	1 100	, ,	, specify expected reward on for finder (Port/Country)	:					
TYPE OF REWARD:	Not T-shirt	Сар	Cash - amount:	FORM COMPLETED E	Y:					
COMMENTS:	IF A TAC	GGED TURTLE / TAGGED E	BIRD WAS RELEASE	D ALIVE, DID YOU LEAVE	THE TAGS ON ? Spe	cify below.				
ARCHIVAL TA	G NUMBER (If applicable):									
	Type of tag	Orange tag or Green ta	20	Reward	l Cap or T-shirt	]				

		SINGLE '	TAG RECO	VERY FORM	Λ	PAGE OF				
EVISED SPC - Feb. 201	7	CRI	TICAL TAG INFO	RMATION		,				
		TAG NUMBER:	DATE WH FOUND:	VV MM	DD					
WHERE FOUND:	Fishing	Reefe	/ Transfer /	Port Fish market	Cold storage					
ACTIVITY WHEN FOUND:	Fishing	Well transfer	Transhipment	Unloading at port	WELL NUMBER WHERE FISH FOUN	(If Applicable)				
TAGGED SF	TAGGED SPECIES INFORMATION									
SPECIES:		CIES IABILITY:	Confirmed	Guessed						
LENGTH 1 : (cm)	LENGTH 2 : if applicable (cm)  NO length Information	HOW MEASUR	RED?	Measuring tool Es	timated					
	WHO MEAS	URED? Port sa	ampler C	bserver Ot	Please her specify:					
Length 1 code:	Length 2 code: PROCESS	ED STATE WHEN MEASUR	RED: Alive	Fresh and o		Frozen then thawed				
WEIGHT: (kg)	NO weight Information	W WEIGHED?	Measuring tool	Estimated						
	PROCESSED STATE WHEN	I WEIGHED:	Whole weight	Gilled & gutted	Other please specify:					
TAGGED SF	PECIES CATCH INFOR	MATION / Date and p	osition when ta	gged species was o	aught by the fish	ning vessel				
DATE	Exact	YY MM DD	Estimated	From YY	MM DD to	YY MM DD				
	Exact		N/S Estimated		in which tag was likel					
POSITION	Latitude	- '	Wax ude	dd mm.mmm	N/S ddd	mm.mmm E/W				
	Longitude	ddd mm.mmm	Latitude Min Max	0 ,	Longitude	0 ,				
	or DESCRIBE FISHING ARE	EA (If NO Lattitude and longit	_							
FISHERY IN	FORMATION (Catcher	· / Fishing vessel that	caugth the tag	ged species)						
VESSEL NAME	:	-	F	LAG:						
FISHING METHOD:	Longline	Purse seine	Troll	Handline	Gill net Othe	r:				
SCHOOL TYPE:	Log	Free school	Anchored FAD	Drifting FAD	FAD no:					
TRANSSHIP	MENT INFORMATION	/ Carrier only (fill this	section only if tag	-	_					
NAME OF CARRIER:		FLA(4.	OF TRANSSHIPMEN NG VESSEL TO CAR		MM DD to	O MM DD				
	TRANSSHIPMENT VESSEL TO CARRIER	TRAN POSIT	ratitude tuments	dd mm.mmm	Ppp Longitude s/k	mm.mmm E/W				
FINDER INF	ORMATION / finder de	etails for lottery								
FINDER NAME			FINDER ADDRESS	S:						
COUNTRY OF RECOVERY:				RMATION RECEIVED AT/ y/Agency name/vessel name						
TAG PROVIDEI WITH THIS FOR	YAS	1 100	, ,	, specify expected reward on for finder (Port/Country)	:					
TYPE OF REWARD:	Not T-shirt	Сар	Cash - amount:	FORM COMPLETED E	Y:					
COMMENTS:	IF A TAC	GGED TURTLE / TAGGED E	BIRD WAS RELEASE	D ALIVE, DID YOU LEAVE	THE TAGS ON ? Spe	cify below.				
ARCHIVAL TA	G NUMBER (If applicable):									
	Type of tag	Orange tag or Green ta	20	Reward	l Cap or T-shirt	]				

#### PAGE OF SPC MULTIPLE TAG RECOVERY FORM MULTIPLE TAGGED FISH FOUND THE SAME DAY, COMING FROM THE SAME SET or THE SAME WELL REVISED SPC -Feb 2017 "When the tag is removed from the fish, DATE WHEN TAG FOUND: be sure none of it remains inside the fish" WHERE Fishing Port Reefer / Transfer / Cold storage FOLIND: vessel Carrier Fish market (If Applicable) ACTIVITY WELL NUMBER Fishing Well transfer Transhipment Unloading at port WHEN FOUND: WHERE FISH FOUND: FISH IDENTIFICATION: TAG SPECIES: BET Please SKJ Other Guessed Confirmed NUMBER: specify. FORK LENGTH Measuring NO length HOW STATE WHEN MEASURED Other Estimated Fresh Frozen Observer MEASURED: MEASURED: Information tool BY: FISH WFIGHT NO weight HOW Measuring STATE WHEN Whole weight Gilled & gutted Estimated Other kg: information WEIGHED: WEIGHED: FISH IDENTIFICATION: TAG Please SPECIES: BET SKJ Other Confirmed Guessed NUMBER: specify. FORK LENGTH NO length HOW STATE WHEN MEASURED Measuring Frozen Other Observer Estimated Fresh MEASURED: Information MEASURED: FISH WEIGHT NO weight HOW Measuring STATE WHEN Gilled & gutted Whole weight Estimated Other kg: WEIGHED: WEIGHED: information FISH IDENTIFICATION: TAG Please SPECIES: BET Other SK.J Confirmed Guessed NUMBER: specify FORK LENGTH NO length HOW Measuring STATE WHEN MEASURED Fresh Other Frozen Estimated Observer MEASURED: MEASURED: Information FISH WEIGHT NO weight HOW STATE WHEN Measuring Whole weight Gilled & gutted Estimated Other kg: information WEIGHED: WEIGHED: FISH IDENTIFICATION TAG Please SPECIES: SKJ BET Other Confirmed Guessed NUMBER: specify FORK **LENGTH** NO length HOW STATE WHEN MEASURED Measuring Frozen Other Estimated Fresh Observe MEASURED: MEASURED: Information FISH WEIGHT NO weight HOW STATE WHEN Measuring Gilled & gutted Whole weight Other Estimated kg: WEIGHED: WEIGHED: information FISH IDENTIFICATION: TAG Please SPECIES: SK.J BET Other Confirmed Guessed NUMBER: specify FORK **LENGTH** NO length HOW Measuring STATE WHEN MEASURED Frozen Othe Estimated Fresh Observe cm: MEASURED: MEASURED: Information tool FISH WEIGHT NO weight HOW STATE WHEN Measuring Whole weight Estimated Gilled & autted Other kg: information WEIGHED: WEIGHED FISH IDENTIFICATION: TAG Please SPECIES: SK.J BET Other Confirmed Guessed NUMBER: specify FORK LENGTH NO length HOW Measuring STATE WHEN MEASURED Estimated Fresh Frozen Observe Othe MEASURED: MEASURED: FISH WEIGHT NO weight HOW Measuring STATE WHEN Whole weight Gilled & gutted Other Estimated kg: information WEIGHED: WEIGHED FISH IDENTIFICATION: TAG Please SPECIES: BET Other Guessed SKJ Confirmed NUMBER: specify FORK LENGTH NO length HOW STATE WHEN MEASURED Measuring Othe Estimated Fresh Frozen Observe ст: Information MEASURED: tool MEASURED: FISH WEIGHT NO weight HOW Measuring STATE WHEN Whole weight Gilled & gutted Estimated Other kg: information WEIGHED: WEIGHED: FISH IDENTIFICATION TAG Please SPECIES: BET SKJ Other Confirmed Guessed NUMBER: specify FORK LENGTH NO length HOW Measuring STATE WHEN MEASURED Estimated Fresh Frozen Observe Other cm: Information MEASURED: MEASURED: tool FISH WEIGHT NO weight HOW Measuring STATE WHEN Estimated Whole weight Gilled & gutted Other kg: WEIGHED: WEIGHED: information tool

FISH CATO	CH INFORMATION	I / Date and position		was caugh	t by the	fishing v	essel					
DATE	Exact	YY MM	DD	Estimated		From	Y !	MM [	to	YY	MM	DD
	Event		nm N/S	Eatimated					2 of longitude		ea of catch	(box)
POSITION	Exact	dd mm.mn	1 1473	Estimated		mm.mmm	N/S	in which ta	g was likely r		.mmm	E/W
	Latitude	ddd mm.mn	nm E/W	Latitude Ain Max	0	. '		Longitude			. '	
	Longitud	le o	'	Latii Min	0	. '		Long	•		. '	
	or DESCRIBE FISHIN	IG AREA (If NO Lattitude a	and longitude pr	rovided above):	·							
FISHERY II	FISHERY INFORMATION (Catcher / Fishing vessel that caught the tagged fish)											
VESSEL NAM	E:			FL	.AG:							
FISHING METHOD:	Longline	Purse seine	Troll		Handline	e		Gill	net Other:			
SCHOOL TYPE:	Log	Free school	Anchore	ed FAD	Drifting I	FAD	FAD no	:				
TRANSSHI	PMENT INFORMA	ATION/ Carrier only	(fill this se	ction only if	tags fo							
NAME OF CARRIER:		FLAG:		RANSSHIPMEN ESSEL TO CARI		Y	Y !	MM [	to	YY	MM	DD
	TRANSSHIPMENT G VESSEL TO	·	TRANSHIPN	MENT 쁑	dd i	mm.mmm	N/S	tude	ddd	mm	.mmm	E/W
CARRIER (EE			POSITION:	Latitude TNBM	0			Longitude	(	-	'	
FINDER IN	FORMATION / fine	der details for lotte	ry									
FINDER NAMI	E:		FIN	IDER ADDRESS	<b>S</b> :							
COUNTRY OF RECOVERY:	:			COVERY INFOR			AT					
ALL TAGS PR WITH THIS FO	1 176	es No	(tags kept by for reward po			fy expected inder (Port/C						
TYPE OF REWARD	Not T-	-shirt Cap	Cas	sh mount:		FORM COMPLETE	D BY:					
,	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•••••	•••••	• • • • • • •	• • • • • • • •	• • • • •		• • • • • • • •	• • • • • •	• • • • • •	• • • •
					<b>∕</b> A\	tacl	a ⊕!!		<sup>දි</sup> න <i>ල</i> ල	e la c		
ADOUNT	AC NUMBER (#	.blo):			<i>u</i> -ue	196961	الى ت		යක්විද	, 000	90 9	
ARCHIVAL T	AG NUMBER (If applica	ible):										

Type of tag	Reward	
Yellow tag, Orange tag or Green tag	<ul> <li>10\$ or Cap or T-shirt</li> </ul>	
Internal archival tag	- 250\$	

#### PAGE OF SPC MULTIPLE TAG RECOVERY FORM MULTIPLE TAGGED FISH FOUND THE SAME DAY, COMING FROM THE SAME SET or THE SAME WELL REVISED SPC -Feb 2017 "When the tag is removed from the fish, DATE WHEN TAG FOUND: be sure none of it remains inside the fish" WHERE Fishing Port Reefer / Transfer / Cold storage FOLIND: vessel Carrier Fish market (If Applicable) ACTIVITY WELL NUMBER Fishing Well transfer Transhipment Unloading at port WHEN FOUND: WHERE FISH FOUND: FISH IDENTIFICATION: TAG SPECIES: BET Please SKJ Other Guessed Confirmed NUMBER: specify. FORK LENGTH Measuring NO length HOW STATE WHEN MEASURED Other Estimated Fresh Frozen Observer MEASURED: MEASURED: Information tool BY: FISH WFIGHT NO weight HOW Measuring STATE WHEN Whole weight Gilled & gutted Estimated Other kg: information WEIGHED: WEIGHED: FISH IDENTIFICATION: TAG Please SPECIES: BET SKJ Other Confirmed Guessed NUMBER: specify. FORK LENGTH NO length HOW STATE WHEN MEASURED Measuring Frozen Other Observer Estimated Fresh MEASURED: Information MEASURED: FISH WEIGHT NO weight HOW Measuring STATE WHEN Gilled & gutted Whole weight Estimated Other kg: WEIGHED: WEIGHED: information FISH IDENTIFICATION: TAG Please SPECIES: BET Other SK.J Confirmed Guessed NUMBER: specify FORK LENGTH NO length HOW Measuring STATE WHEN MEASURED Fresh Other Frozen Estimated Observer MEASURED: MEASURED: Information FISH WEIGHT NO weight HOW STATE WHEN Measuring Whole weight Gilled & gutted Estimated Other kg: information WEIGHED: WEIGHED: FISH IDENTIFICATION TAG Please SPECIES: SKJ BET Other Confirmed Guessed NUMBER: specify FORK **LENGTH** NO length HOW STATE WHEN MEASURED Measuring Frozen Other Estimated Fresh Observe MEASURED: MEASURED: Information FISH WEIGHT NO weight HOW STATE WHEN Measuring Gilled & gutted Whole weight Other Estimated kg: WEIGHED: WEIGHED: information FISH IDENTIFICATION: TAG Please SPECIES: SK.J BET Other Confirmed Guessed NUMBER: specify FORK **LENGTH** NO length HOW Measuring STATE WHEN MEASURED Frozen Othe Estimated Fresh Observe cm: MEASURED: MEASURED: Information tool FISH WEIGHT NO weight HOW STATE WHEN Measuring Whole weight Estimated Gilled & autted Other kg: information WEIGHED: WEIGHED FISH IDENTIFICATION: TAG Please SPECIES: SK.J BET Other Confirmed Guessed NUMBER: specify FORK LENGTH NO length HOW Measuring STATE WHEN MEASURED Estimated Fresh Frozen Observe Othe MEASURED: MEASURED: FISH WEIGHT NO weight HOW Measuring STATE WHEN Whole weight Gilled & gutted Other Estimated kg: information WEIGHED: WEIGHED FISH IDENTIFICATION: TAG Please SPECIES: BET Other Guessed SKJ Confirmed NUMBER: specify FORK LENGTH NO length HOW STATE WHEN MEASURED Measuring Othe Estimated Fresh Frozen Observe ст: Information MEASURED: tool MEASURED: FISH WEIGHT NO weight HOW Measuring STATE WHEN Whole weight Gilled & gutted Estimated Other kg: information WEIGHED: WEIGHED: FISH IDENTIFICATION TAG Please SPECIES: BET SKJ Other Confirmed Guessed NUMBER: specify FORK LENGTH NO length HOW Measuring STATE WHEN MEASURED Estimated Fresh Frozen Observe Other cm: Information MEASURED: MEASURED: tool FISH WEIGHT NO weight HOW Measuring STATE WHEN Estimated Whole weight Gilled & gutted Other kg: WEIGHED: WEIGHED: information tool

FISH CATO	CH INFORMATION	I / Date and position		was caugh	t by the	fishing v	essel					
DATE	Exact	YY MM	DD	Estimated		From	Y !	MM [	to	YY	MM	DD
	Event		nm N/S	Eatimated					2 of longitude		ea of catch	(box)
POSITION	Exact	dd mm.mn	1 1473	Estimated		mm.mmm	N/S	in which ta	g was likely r		.mmm	E/W
	Latitude	ddd mm.mn	nm E/W	Latitude Ain Max	0	. '		Longitude			. '	
	Longitud	le o	'	Latii Min	0	. '		Long	•		. '	
	or DESCRIBE FISHIN	IG AREA (If NO Lattitude a	and longitude pr	rovided above):	·							
FISHERY II	FISHERY INFORMATION (Catcher / Fishing vessel that caught the tagged fish)											
VESSEL NAM	E:			FL	.AG:							
FISHING METHOD:	Longline	Purse seine	Troll		Handline	e		Gill	net Other:			
SCHOOL TYPE:	Log	Free school	Anchore	ed FAD	Drifting I	FAD	FAD no	:				
TRANSSHI	PMENT INFORMA	ATION/ Carrier only	(fill this se	ction only if	tags fo							
NAME OF CARRIER:		FLAG:		RANSSHIPMEN ESSEL TO CARI		Y	Y !	MM [	to	YY	MM	DD
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FINDER IN	FORMATION / fine	der details for lotte	ry									
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TYPE OF REWARD	Not T-	-shirt Cap	Cas	sh mount:		FORM COMPLETE	D BY:					
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ARCHIVAL T	AG NUMBER (If applica	ible):										

Type of tag	Reward	
Yellow tag, Orange tag or Green tag	<ul> <li>10\$ or Cap or T-shirt</li> </ul>	
Internal archival tag	- 250\$	

#### PAGE OF SPC MULTIPLE TAG RECOVERY FORM MULTIPLE TAGGED FISH FOUND THE SAME DAY, COMING FROM THE SAME SET or THE SAME WELL REVISED SPC -Feb 2017 "When the tag is removed from the fish, DATE WHEN TAG FOUND: be sure none of it remains inside the fish" WHERE Fishing Port Reefer / Transfer / Cold storage FOLIND: vessel Carrier Fish market (If Applicable) ACTIVITY WELL NUMBER Fishing Well transfer Transhipment Unloading at port WHEN FOUND: WHERE FISH FOUND: FISH IDENTIFICATION: TAG SPECIES: BET Please SKJ Other Guessed Confirmed NUMBER: specify. FORK LENGTH Measuring NO length HOW STATE WHEN MEASURED Other Estimated Fresh Frozen Observer MEASURED: MEASURED: Information tool BY: FISH WFIGHT NO weight HOW Measuring STATE WHEN Whole weight Gilled & gutted Estimated Other kg: information WEIGHED: WEIGHED: FISH IDENTIFICATION: TAG Please SPECIES: BET SKJ Other Confirmed Guessed NUMBER: specify. FORK LENGTH NO length HOW STATE WHEN MEASURED Measuring Frozen Other Observer Estimated Fresh MEASURED: Information MEASURED: FISH WEIGHT NO weight HOW Measuring STATE WHEN Gilled & gutted Whole weight Estimated Other kg: WEIGHED: WEIGHED: information FISH IDENTIFICATION: TAG Please SPECIES: BET Other SK.J Confirmed Guessed NUMBER: specify FORK LENGTH NO length HOW Measuring STATE WHEN MEASURED Fresh Other Frozen Estimated Observer MEASURED: MEASURED: Information FISH WEIGHT NO weight HOW STATE WHEN Measuring Whole weight Gilled & gutted Estimated Other kg: information WEIGHED: WEIGHED: FISH IDENTIFICATION TAG Please SPECIES: SKJ BET Other Confirmed Guessed NUMBER: specify FORK **LENGTH** NO length HOW STATE WHEN MEASURED Measuring Frozen Other Estimated Fresh Observe MEASURED: MEASURED: Information FISH WEIGHT NO weight HOW STATE WHEN Measuring Gilled & gutted Whole weight Other Estimated kg: WEIGHED: WEIGHED: information FISH IDENTIFICATION: TAG Please SPECIES: SK.J BET Other Confirmed Guessed NUMBER: specify FORK **LENGTH** NO length HOW Measuring STATE WHEN MEASURED Frozen Othe Estimated Fresh Observe cm: MEASURED: MEASURED: Information tool FISH WEIGHT NO weight HOW STATE WHEN Measuring Whole weight Estimated Gilled & autted Other kg: information WEIGHED: WEIGHED FISH IDENTIFICATION: TAG Please SPECIES: SK.J BET Other Confirmed Guessed NUMBER: specify FORK LENGTH NO length HOW Measuring STATE WHEN MEASURED Estimated Fresh Frozen Observe Othe MEASURED: MEASURED: FISH WEIGHT NO weight HOW Measuring STATE WHEN Whole weight Gilled & gutted Other Estimated kg: information WEIGHED: WEIGHED FISH IDENTIFICATION: TAG Please SPECIES: BET Other Guessed SKJ Confirmed NUMBER: specify FORK LENGTH NO length HOW STATE WHEN MEASURED Measuring Othe Estimated Fresh Frozen Observe ст: Information MEASURED: tool MEASURED: FISH WEIGHT NO weight HOW Measuring STATE WHEN Whole weight Gilled & gutted Estimated Other kg: information WEIGHED: WEIGHED: FISH IDENTIFICATION TAG Please SPECIES: BET SKJ Other Confirmed Guessed NUMBER: specify FORK LENGTH NO length HOW Measuring STATE WHEN MEASURED Estimated Fresh Frozen Observe Other cm: Information MEASURED: MEASURED: tool FISH WEIGHT NO weight HOW Measuring STATE WHEN Estimated Whole weight Gilled & gutted Other kg: WEIGHED: WEIGHED: information tool

FISH CATO	CH INFORMATION	I / Date and position		was caugh	t by the	fishing v	essel					
DATE	Exact	YY MM	DD	Estimated		From	Y !	MM [	to	YY	MM	DD
	Event		nm N/S	Eatimated					2 of longitude		ea of catch	(box)
POSITION	Exact	dd mm.mn	1 1473	Estimated		mm.mmm	N/S	in which ta	g was likely r		.mmm	E/W
	Latitude	ddd mm.mn	nm E/W	Latitude Ain Max	0	. '		Longitude			. '	
	Longitud	le o	'	Latii Min	0	. '		Long	•		. '	
	or DESCRIBE FISHIN	IG AREA (If NO Lattitude a	and longitude pr	rovided above):	·							
FISHERY II	FISHERY INFORMATION (Catcher / Fishing vessel that caught the tagged fish)											
VESSEL NAM	E:			FL	.AG:							
FISHING METHOD:	Longline	Purse seine	Troll		Handline	e		Gill	net Other:			
SCHOOL TYPE:	Log	Free school	Anchore	ed FAD	Drifting I	FAD	FAD no	:				
TRANSSHI	PMENT INFORMA	ATION/ Carrier only	(fill this se	ction only if	tags fo							
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ALL TAGS PR WITH THIS FO	1 176	es No	(tags kept by for reward po			fy expected inder (Port/C						
TYPE OF REWARD	Not T-	-shirt Cap	Cas	sh mount:		FORM COMPLETE	D BY:					
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ARCHIVAL T	AG NUMBER (If applica	ible):										

Type of tag	Reward
Yellow tag, Orange tag or Green tag	<ul> <li>10\$ or Cap or T-shirt</li> </ul>
Internal archival tag	- 250\$

Attach any loose pages here (Crew list, Well Layout, Net Plans etc)

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		OBSERVERS' GUIDE TO BEAUFORT SCALE, WIND AND SEA STATE (ar	(a rough guide for the open sea)	open sea)	
<b>Beaufort</b> number	Descriptive term	Open sea criterion	Mean wind speed (kts)	Likely wave height (m)	Observers' sea state code
0	Calm	Sea like a mirror	less than 1		C (calm)
1	Light air	Ripples with the appearance of scales are formed but without foam crests	1-3	0.1	
2	Light breeze	Small wavelets, still short but more pronounced; crests have a glassy appearance and do not break	4-6	0.2	S (slight)
33	Gentle breeze	Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses	7-10	9.0	
4	Moderate breeze	Small waves, becoming longer; fairly frequent white horses	11-16	П	M (moderate)
5	Fresh breeze	Moderate waves, taking a more pronounced long form; many white horses are formed (chance of some spray)	17-21	2	
9	Strong breeze	Large waves begin to form; the white foam crests are more extensive everywhere (probably some spray)	22-27	3	R (rough)
7	Near gale	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind	28-33	4	
∞	Gale	Moderately high waves of greater length; edges of crests begin to break into spindthrift; the foam is blown in well marked streaks along the direction of the wind	34-40	5.5	V (very rough)
6	Strong gale	High seas; crests begin to topple and tumble; spray	41-47	7	
10	Storm	Very high waves; surface of sea white; visibility affected	48-55	6	
11	Violent storm	Exceptionally high waves (hiding small to medium ships)	56-63	11.5	Time to be concerned! Our condolences!
12	Hurricane	Air filled with foam and driving spray; visibility minimal	more than 64	14	