

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
“REV.2018”

1.	One of these Observer Workbooks for every 35 days at sea.	
2.	Sufficient Catch Monitoring Forms PS-4's for the trip (<i>30 sheets per pad</i>)	
3.	Extra pads of PS-2, PS-3, GEN-5 forms as required (<i>30 sheets per pad</i>)	
4.	NEW: Trip Report Booklet (<i>one per trip</i>)	
5.	Sufficient Observer Journals (<i>normally 30 pages per Journal</i>)	
6.	Two blank notebooks (<i>preferably waterproof</i>)	
7.	One box of pens and pencils (<i>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</i>)	
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 printed. 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 ??? (whatever it is). See journal page No. ??"
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 observer trip ID number 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**

FORM SUP-1 (pg1)

REV 2018

TRIP DETAILS

OBSERVER NAME		TRIP START LOCATION		TRIP START DATE (YY/ MM/DD)	
OBSERVER TRIP ID NUMBER		ESTIMATED TRIP END LOCATION		VESSEL GEAR	
VESSEL NAME		FLAG	CALIPER SERIAL NUMBER	UVI and / or IRCS	
VESSEL SIZE: indicate circle to	< 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, as well as over see that information is recorded and actions taken as prescribe in this form. Please intial the space at the left of each number item to show it has been

<i>Initial :</i>		<i>Placement Officer to initial when they have:</i>
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.
<i>Initial :</i>		<i>Observer to initial when they have:</i>
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.
<i>Initial :</i>		<i>Vessel Captain to initial when they have:</i>
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.

Notes for the VESSEL CAPTAIN on the OBSERVER PLACEMENT

An observer's primary function is to collect and report reliable and accurate information for scientific, management and compliance. Observers collect data on any fish, including catch and effort, size composition, position, fishing methods, fisheries interactions, environmental impact, processing and distribution (including discards) and any other matter that may assist fisheries managers verify information for purpose of administering fisheries regulations, license requirements and access agreements.

The observer duties and their obligations, along with the obligations of the vessel operator to the observers are described below. A thorough understanding of these by both the vessel operator and the observer will help ensure an effective working arrangement while on board.

→ Vessel Captain please read and initial when the obligations of both parties is understood

Capt. Initials

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 personnel do not assault, obstruct, resist, refuse boarding to, delay, intimidate or interfere with an observer performing observer duties	18
19	Show the observer appropriate vessel safety procedures and location of various safety equipment (life rafts, life jackets, etc) and how to use such equipment in the event of an emergency	19
20	Advise the observer of dangerous work areas and instruct the observer on how to minimise exposure (e.g. hard hat) to danger yet still do their work	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	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
24	Inform vessel Captain of where he can get a copy of the Vessel Report on the Observer	24

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

FORM SUP-1 (pg2)

REV 2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER
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VESSEL SAFETY CHECK

	CIRCLE ONE	COMMENTS
1 VESSEL SURVEY DOCUMENTATION (Current)	Yes No	
2 CORRECT SIZE PERSONAL FLOATATION DEVICES AVAILABLE	Yes No	
3 APPROVED LIFERAFT OR LIFEBOATS UNDER CURRENT SURVEY 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 ORDER	Yes No	
7 FIRE EXTINGUISHERS (Current Checked)	Yes No	
8 MARINE RADIO HF SSB or SUBITUTE COMMUNICATIONS	Yes No	
9 NAVIGATION LIGHTS / VESSEL LIGHTS (Working Order)	Yes No	
10 SOUND PRODUCING DEVICES OR BELL	Yes No	
11 REGISTRATION DOCUMENTATION IN ORDER	Yes No	
12 OTHER WORK RELATED VESSELS ON BOARD THAT COULD BE UTILISED IN CASE OF EMERGENCY	Yes No	
13 NAUTICAL CHARTS AND NAVIGATION AIDS (GPS/RADAR)	Yes No	
14 FIRST AID EQUIPMENT	Yes No	
15 SANITATION	Yes No	
16 PHONE	Yes No	
17 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 WORK SAFELY	Yes No	

THE OBSERVER WAS PRESENT FOR THE VSC AND AGREES TO BOARD THE VESSEL YES / NO

(If no: record the reasons here and continue on to another attached page if necessary)

ACKNOWLEDGED (Observer Placement Meeting Record - page 1 and page 2, front and back read/ initialed/ accepted)

OBSERVER	NAME	SIGNATURE	DATE
VESSEL CAPTAIN	NAME	SIGNATURE	DATE
FISHING MASTER (if any)	NAME	SIGNATURE	DATE
FISHING AUTHORITY REPRESENTATIVE	NAME	SIGNATURE	DATE
INTERPRETER (if any)	NAME / POSITION	SIGNATURE	DATE
FISHING AUTHORITY REPRESENTATIVE	POSITION	SIGNATURE	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 signaling 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 determined by 11th Tuna Fishery Data Collection Committee (DCC11), 2018.

Purse Seine Observer Forms

GEN 5

Change observer instructions on the GEN-5 form to put a priority on recording the dFAD serial number on the GEN-5 buoy number field rather than other markings, e.g., changing the instructions to have observers record the serial number and, only if not possible, to record any other identifying information in as much detail as possible

FAD/PAYAO and FLOATING OBJECTS INFORMATION RECORD													Form GEN-5	
REVISED 2018														
OBSERVER NAME:					VESSEL NAME:					OBSERVER TRIP ID NUMBER:			PAGE OF	
Date (from PS-2)	Time	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	Beacon/ FAD lifted	FAD as left	Comments / Change details	
											Beac/FAD/ NO			
FAD materials		net/mesh size	Attachments		net/mesh size	Max est. depth	FAD length	FAD width	Buoy serial number	Beacon/FAD ID markings	SSI seen	SSI trapped		
		cm			cm	M	M	M			Y / N / U	Y / N / U		

Old Field: 'Buoy Number'

Issue:

Observers are recording any script that is painted on buoy as identification. This frequently has no association with the registration of the buoy.

Buoy number recoded by observers had no connection on the FAD register to the serial number.

Change made

Change the field to **Buoy Serial Number** and instructions to clarify this.

Old Field : FAD/Payao No. and or markings

Issue

To accommodate observers current practice of recording marking on the buoy as **buoy number** and due to the change of **Buoy number** to **Buoy Serial Number**

It was suggested that **FAD/Payao No. and or markings** be modified to add Beacon to be **Beacon or FAD ID Marking** (indicate)

Change Made:

Modify field to **Beacon / FAD ID markings**

Old Field : FAD Lifted

Issue

As beacons may be changed as a part of servicing or removed and replaced by competing purse seiners, there needs to be a way to capture when a beacon was replaced.

Changing the FAD lifted to **Beacon/FAD Lifted**.

With instructions to indicate which or both by circling? Instructions would also ask observers to provide buoy type in the **Comments**.

SPC/FFA REGIONAL OBSERVER WORKBOOK REFERENCE FORM

FORM SUP-2

for Purse Seine

REV. 2018

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)	Placement Form (pg1)	
SUP-1 (page 2)	Placement Form (pg2)	
SUP-2	Workbook Reference Form	
PS-1 (page 1)	Purse-Seine General Information (pg1)	
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	Conservation 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 mutiple tags)	
JOU	Journal	
RPT	Trip Report Submitted	

(RECORD TOTAL NUMBER OF PAGES)

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	

WORKBOOK TRANSFER

WAS THIS COPY DEBRIEFED BEFORE TRANSFER?	YES or NO
DATE TRANSFERRED	

SPC/FFA REGIONAL PURSE SEINE

OBSERVER
GENERAL INFORMATION

FORM PS-1 (pg 1)

OBSERVER
PROGRAMME:

REV. 2018

TRIP DETAILS

OBSERVER	NAME		TRIP START LOCATION		TRIP START (SHIP'S DATE AND TIME)						
					YY	MM	DD	h h	m m		
	NATIONALITY		TRIP ID NUMBER		TRIP END (SHIP'S DATE AND TIME)						
					YY	MM	DD	h h	m m		
VESSEL NAME			FISHING PERMIT / LICENSE No.s			VESSEL DEPARTURE PORT			VESSEL DEPARTURE DATE		
									YY	MM	DD

VESSEL CHARACTERISTICS

VESSEL OWNER		COUNTRY REG. No.	IRCS	UVI	FLAG	LENGTH	M	GT	(circle one)
							F	GRT	mT
No. of SPEED BOATS	No. of OTHER ONBOARD AUXILIARY BOATS	Do OTHER TENDER BOATS WORK with CATCHER		Y / N	MAKE / POWER		VESSEL CRUISING SPEED:		kts
HELICOPTER CHARACTERISTICS		MAKE	MODEL	REGISTRATION NUMBER	EFFECTIVE RANGE	KM	COLOUR	No. of VESSELS that the HELICOPTER SERVICES: (including this vessel)	
						NM			

FISHING GEAR

MAKE		MODEL		MAKE		MODEL		BRAIL	1	TYPE		LIVE FISH BRAIL:	Y N	
POWER BLOCK:				PURSE WINCH:							mT			
NET - MAX. DEPTH:	M Y F	NET - MAX. LENGTH:	Metres Yards Fathoms	NET - No. of STRIPS	NET - MESH SIZE (of main body)	CM	IN	BRAIL	2	TYPE		LIVE FISH BRAIL:	Y N	
											mT			
BRAIL TYPE CODES	LH - LONG HANDLE	HF - HEAVY FRAME	BRAIL CHANGE COMMENTS						BRAIL	3	TYPE		LIVE FISH BRAIL:	Y N
		SP - SPANISH TYPE	JP - JAPANESE TYPE								mT			

ELECTRONICS

GPS		Y / N		DEPTH SOUNDER		Y / N		
TRACK PLOTTER		Y / N		SST GAUGE		Y / N		
USAGE		MAKE		MODEL		COMMENTS		
ADV in TEC.	EQUIPMENT TYPE	Y / N						
	EQUIPMENT TYPE	Y / N						
	BIRD RADAR	Y / N						
	SONAR	Y / N						
	GPS BUOYS	Y / N						
	ECHO SOUNDING BUOY	Y / N						
	NET DEPTH INSTRUMENTATION	Y / N						
	DOPPLER CURRENT METER	Y / N						
VMS SYSTEMS	AIS	Y / N						
	1	Y / N						
		2	Y / N					
COMMUNICATION SERVICES	PHONES	SATELLITE:	Y / N	Phone #		MOBILE/ CELL PHONE:	Y / N	Phone #
	OTHER	FACSIMILE:	Y / N	Fax #				
INFORMATION SERVICES	WEATHER	WEATHER FAX:	Y / N	WEATHER SATELLITE MONITOR:	Y / N	EMAIL:	Y / N	Email address:
	WEBSITES	PHYTOPLANTION		Y / N	SST	Y / N	SEA HEIGHT	Y / N
		www.			www.		www.	

OBSERVATIONS / COMMENTS / OTHER GEAR / UNUSUAL USE OF GEAR
(write brief notes here and a full description in trip report)

USAGE CODES

- 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.

GENERAL INFORMATION

Notes on FORM PS-1 (pg 1)

REV. 2018		N.B.: Wherever there is a Y / N (yes or no) option for an item, either the "Y" or the "N" must be circled	
		A complete fishing trip is defined as 'from one full or partial unloading to the next full /partial unloading'. If not a complete fishing trip explain reasons why in trip report - also see "Partial trips" below.	
TRIP DETAILS			
OBSERVER	NAME and NATIONALITY	First and family names must be in full and in correct order (e.g. "John Masa" not "Masa, John"). Nationality as passport.	
	TRIP ID NO.	Print number issued by the authority sending you on this trip. (E.g.: John H. Masa, on his third trip in 1996 might be issued Trip ID Number: "JHM 96-03").	
	TRIP START (SHIP'S DATE and TIME)	} Print date using "year year/ month month / day day" format.	
	TRIP END	} Print time using 24 hour "hour hour : minute minute" format.	
	TRIP START LOCATION	/ TRIP END LOCATION / VESSEL DEPARTURE PORT: Record in all three boxes even if the same port.	
	Partial trips	N.B.:Observer trip officially starts and ends only when the vessel on which the catch is actually observed is boarded and disembarked. If 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 ⁰ 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. (The name "Captain Paul John Smith" should not be abbreviated to Capt. P.J. Smith.)	
FISHING PERMIT / LICENSE NUMBERS		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 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 COUNTRY REGISTRATION NUMBER		Name of Company or Person who owns the vessel. This should be in the Registration Papers.	
VESSEL FLAG		Number given by the Country (Flag State) to where the vessel is registered. This can be found in the registration papers of the vessel. Do not confuse this with FFA Regional Registration Number.	
IRCS (international radio call)		Country where vessel is registered. E.g.: Japanese purse seiners are usually registered in Japan so their Flag State is Japan.	
UVI - Unique Vessel Identifier		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.	
NO OF SPEED BOATS		WCPFC requires all vessels over 100 Gross Tonnage to have a UVI after 1st Jan 2016. Generally the UVI is the International Marine Organisation number or may be the Lloyd's Register (LR) no.	
NO OF AUXILIARY 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.	
Do OTHER TENDER BOATS WORK with CATCHER ?		Count only the tow boats and light boats that the vessel keeps <u>onboard</u> . Don't count a speed boat if it is already counted.	
NET SKIFF ENGINE MAKE / POWER		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. N.B.: do not include such boats, operating as light boats, in the count of "Auxiliary boats onboard". Describe operations in trip report.	
VESSEL CRUISING SPEED		Brand of engine used in net skiff and the power (horsepower - hp). Get this from the skiff driver. E.g.: Caterpillar 3408 (400hp)	
HELICOPTER MAKE/MODEL		LENGTH	
REGISTRATION NO.		GROSS TONNAGE	
EFFECTIVE RANGE		The place to find vessel's length overall (LOA) and gross tonnage is on registration papers. Be alert for any signs that suggest there has been a change to length and/or gross tonnage. Note in report.	
COLOUR of HELIC		Main colour or colours of the helicopter	
FISHING GEAR			
POWER BLOCK - Make - Model		Brand of main power block on the vessel. The model of the block.	
PURSE WINCH (Make, Model)		If these cannot be seen, ask the captain, engineer or winch driver. Only fill in this information if sure it is correct.	
MAX. NET DEPTH		Brand of main purse winch on the vessel. The model of the winch.	
MAX. NET LENGTH		If unsure, record the information in your written report only, with a note.	
NET - No OF STRIPS		M = Metres; Y = Yards; F = Fathoms. Make sure you circle the correct unit used on the vessel for net measurements.	
NET MESH SIZE OF MAIN SECTION		Deepest depth of the net wall when it has been set.	
BRAIL: TYPE, CAPACITY, LIVE FISH BRAIL		The length of the net when it has been set.	
Brail change comments		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 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. 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 estimate the total catch. Remember to identify the same brail (brail 1) in the same way (brail 1) on the PS-4 form. If there is a second type of 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 all the brail details and specifying the type, new capacity and whether the brail is used for live fish brailing. <u>Provide brief comments</u> on the brail change (like date, reason etc) in this data field.	
ELECTRONICS-YES / NO-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.			
USAGE use codes (bottom front of form) to show how much each piece of equipment, for which "Y" is circled, is used.			
NEW TECH: 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.			
AIS Automatic Identification System: Transponding unit that will be attached to VHF Antenna, but maybe located inside.			
MAKE AND MODEL		Name of company and model (name or number) of each device listed. Don't mix up make and model. E.g.: for a "JRC, JMA - 7790": "JRC" is the brand (make); "JMA - 7790" is the model.	
VMS System: INFORMATION SERVICES		Record the manufacturer's name (e.g.: Trimble, Thrane and Thrane, Furuno, etc.) and the model of the MTU unit. Vessels may access "Fishery information services" to get instant information on oceanographic features.	
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
GENERAL INFORMATION**

FORM PS - 1 (pg 2)

REV. 2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER
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TOTAL POSSIBLE FISH STORAGE CAPACITY (in metric tonnes):



mT

CREW	NAME	YRS.EXP	NATIONALITY	COMMENTS
CAPTAIN				License No.
MASTER				License No.
NAVIGATOR				
MATE				
CHIEF ENGINEER				
ASSISTANT ENGINEER				
DECK BOSS				
COOK				
HELICOPTER PILOT				
HELICOPTER MECHANIC				
RADIO OPERATOR				
SKIFF MAN				
WINCH MAN				
TRANSLATOR				

CREW	NAME	YRS.EXP	NATIONALITY	CREW	NAME	YRS.EXP	NATIONALITY

TOTAL NUMBER OF CREW (include Captain and officers):



WASTE DISPOSAL SYSTEM ?	Y / N	SAFETY EQUIPMENT						
DESCRIBE waste disposal system especially for fish offal, but also other waste.	LIFE JACKET		PROVIDED FOR OBSERVER:		Y / N / O		Number of LIFE BUOYS / LIFE RINGS	
	AVAILABILITY (circle one)		SUITABLE SIZE:		Y / N			
			Easy	Moderate	Hard			
	LIFE RAFTS		1		2		3	
	Number of people and Inspection due date(D) or last date of inspection (L)		Number		Number		Number	
	YY / MM (L or D)		YY / MM (L or D)		YY / MM (L or D)		YY / MM (L or D)	
EPIRB (406)		Total No.	No. with Exp. Batteries		EPIRB (other)		Total No.	No. with Exp. Batteries

COMMENTS or DRAWINGS of WELL PATTERN

GENERAL INFORMATION

Notes on Form PS-1 (pg.2)

REV. 2018

OBSERVER NAME	Print your name in full. Put your first name, or Christian name, first and lyour last name, or surname, last.
VESSEL 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	<p>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.</p> <p>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".</p> <p>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.</p> <p>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.</p>
(for listed specialist positions)	
(for non-specialist 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 EXPERIENCE (YRS.EXP)	Record the number of years experience the crew member or officer has <u>in this position</u> . 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.
COMMENTS	Record any information about the crew in this column. Any relevant information may be useful. Examples could include: name of boat previously worked; name of Fishery College attended; famous fishing family connection; etc.
License No.s (Captain / Master / Navigator)	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.
TOTAL NUMBER OF CREW (include Captain and officers)	Add up all the crew. Include the Captain, listed positions and other crew. But be very careful not to count any of the crew twice.
	This is an easy mistake to make in situations where one crew person has two different positions. Be Careful !
WASTE DISPOSAL SYSTEM	<p>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.</p> <p>Examples of equipment of equipment include incinerators, crushers, shredders, compacters, balers, meal plants, etc.</p> <p>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?)</p>

SAFETY EQUIPMENT

(obtain as much information as possible without

LIFE JACKET	<p>If observer has their own (or a fisheries) life jacket (LJ), the "O" must be circled.</p> <p>Otherwise circle the "Y" or "N" to show if the vessel showed the observer a L J that they could use in an emergency.</p> <p>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" if not so easy to get to, or "hard" if it would be very hard to find in an emergency.</p>
EPIRBS LIFEBUOYS / LIFE RINGS	<p>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).</p> <p>Count all lifebuoys and life rings that can be found</p>
LIFE RAFTS	Find info on labels on life-rafts. If, after a careful check , dates are not found, record "ND" for 'dates not displayed'.

SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV.2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF
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	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and Set No. - from PS-3)	START OF DAY	
													SHIP's DATE	SHIP's TIME
1													UTC DATE	UTC TIME
2													ALL MUST BE RECORDED	
3													ACTIVITY and HELICOPTER CODES	
4													1 Set	If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record
5													2 Searching	
6													3 Transit	
7													4 No fishing - Breakdown	
8													5 No fishing - Bad weather	
9													6 In port - please specify	
10													7 Net cleaning set	
11													8 Investigate free school	
12													9 Investigate floating object	
13													10D Deploy - raft, FAD or payao	
14													10R Retrieve - raft, FAD or payao	
15													11 Drifting at day's end	
16													12 Drifting with floating object	
17													13 Other reason (specify)	
18													14 Drifting -With fish aggregating lights	
19													15R Retrieve radio buoy	
20													15D Deploy radio buoy	
21													16 Transshipping or bunkering	
22													17 Servicing FAD or floating object	
23													18 Drifting - No fishing	
													H1 Helicopter takes off to search	
													H2 Helicopter returned from search	

													HOW DETECTED	
													1 Seen from vessel	"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on
													2 Seen from helicopter	
													3 Marked with beacon	
													4 Bird radar	
													5 Sonar / depth sounder	
													6 Info. from other vessel	
													7 Anchored FAD / payao (recorded)	

													SCHOOL ASSOCIATION (tuna)	
													1 Unassociated	} Free schools
													2 Feeding on Baitfish	
													3 Drifting log, debris or dead animal	
													4 Drifting raft, FAD or payao	
													5 Anchored raft, FAD or payao	
													6 Live whale	
													7 Live whale shark	
													8 Other (please specify)	
													9 No tuna associated	

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects		Free floating objects (no anchor)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY ?	
	(with NO school)	(with school)	(with NO school)	(with school)		YES NO	Journal
Example N/I/ 6	Tally	Tally	Tally	Tally	Tally	YES NO (circle one)	pg #
	No.	No.	No.	No.	No.		

OBSERVER'S DAILY LOG

<p><u>Observer Name</u> and <u>Vessel Name</u> : Always print each of these names out in full (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")</p> <p><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").</p>	<p><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 <u>1 of 36</u>", the fourth page, "Page <u>4 of 36</u>" and the last page will be "Page <u>36 of 36</u>").</p>
<p><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.</p> <p><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. 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")</p> <p><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.</p> <p><u>Wind (kts)</u> (°): 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.</p> <p><u>Sea conditions (C-S-M-R-V)</u> . 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.</p> <p><u>Comments (and Set No. - from PS-3)</u> - for all activity code "1" write the set No. before the comments in this field. Get "set No." from the PS-3 that must be used every set.</p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Observers should record Ship's time in all other forms and paperwork.</p>
<p><u>Floating object and school sightings</u> : 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.</p> <p><u>Tally</u> : Mark with a stroke every time you sight something (see example on front)</p> <p><u>No</u> : Count the "tally" strokes at end of day to get the number of each type of sighting.</p>	<p><u>Activity and Helicopter Codes</u> : 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 <u>codes</u> 1, 8, 9 or <u>17</u> always use <u>school association</u> (<u>tuna</u>) and <u>how detected</u> codes, otherwise the school association (tuna) and how detected code fields must be dashed !</p> <p>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.</p> <p>If using code 16 remember that transhipment includes any transfer between vessels</p> <p>Use code 17 if making any repair or change to floating objects other than changing buoys</p> <p>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 (<u>named</u>) vessel, arrive from other (<u>named</u>) vessel, visit shore, rescue seaman, etc.</p>
<p><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.</p>	<p><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 first 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.)</p> <p>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.</p> <p>Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.</p> <p><u>School Association (tuna)</u> : 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.</p>

SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV.2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF
---------------	-------------	-------------------------	---------

SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)		SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and Set No. - from PS-3)	START OF DAY	
							DATE	TIME					SHIP's DATE	SHIP's TIME
1														
2														
3														
4														
5														
6														
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22														
23														

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

- 1 Set
- 2 Searching
- 3 Transit
- 4 No fishing - Breakdown
- 5 No fishing - Bad weather
- 6 In port - please specify
- 7 Net cleaning set
- 8 Investigate free school
- 9 Investigate floating object
- 10D Deploy - raft, FAD or payao
- 10R Retrieve - raft, FAD or payao
- 11 Drifting at day's end
- 12 Drifting with floating object
- 13 Other reason (specify)
- 14 Drifting -With fish aggregating lights
- 15R Retrieve radio buoy
- 15D Deploy radio buoy
- 16 Transshipping or bunkering
- 17 Servicing FAD or floating object
- 18 Drifting - No fishing
- H1 Helicopter takes off to search
- H2 Helicopter returned from search
-

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ?
- use first line for 15R and next for 15D

HOW DETECTED

- 1 Seen from vessel
- 2 Seen from helicopter
- 3 Marked with beacon
- 4 Bird radar
- 5 Sonar / depth sounder
- 6 Info. from other vessel
- 7 Anchored FAD / payao (recorded)
-

"Seen from helicopter"
Use when vessel gets to the school of tuna that helicopter either:
1. reported on; or
2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

- 1 Unassociated
- 2 Feeding on Baitfish
- 3 Drifting log, debris or dead animal
- 4 Drifting raft, FAD or payao
- 5 Anchored raft, FAD or payao
- 6 Live whale
- 7 Live whale shark
- 8 Other (please specify)
- 9 No tuna associated

} Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with NO school) (with school)		Free floating objects (no anchor) (with NO school) (with school)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY ?		
	Tally	No.	Tally	No.		Tally	No.	YES NO (circle one)
Example N/I								
6								

OBSERVER'S DAILY LOG

<p><u>Observer Name</u> and <u>Vessel Name</u>: Always print each of these names out in full (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")</p> <p><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").</p>	<p><u>Page of</u>: Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc.</p> <p>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 <u>1 of 36</u>", the fourth page, "Page <u>4 of 36</u>" and the last page will be "Page <u>36 of 36</u>").</p>
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SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV.2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF
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SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)		SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and Set No. - from PS-3)	START OF DAY	
							DATE	TIME					SHIP's DATE	SHIP's TIME
1														
2														
3														
4														
5														
6														
7														
8														
9														
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19														
20														
21														
22														
23														

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

- 1 Set
- 2 Searching
- 3 Transit
- 4 No fishing - Breakdown
- 5 No fishing - Bad weather
- 6 In port - please specify
- 7 Net cleaning set
- 8 Investigate free school
- 9 Investigate floating object
- 10D Deploy - raft, FAD or payao
- 10R Retrieve - raft, FAD or payao
- 11 Drifting at day's end
- 12 Drifting with floating object
- 13 Other reason (specify)
- 14 Drifting -With fish aggregating lights
- 15R Retrieve radio buoy
- 15D Deploy radio buoy
- 16 Transshipping or bunkering
- 17 Servicing FAD or floating object
- 18 Drifting - No fishing
- H1 Helicopter takes off to search
- H2 Helicopter returned from search
-

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ? - use first line for 15R and next for 15D

HOW DETECTED

- 1 Seen from vessel
- 2 Seen from helicopter
- 3 Marked with beacon
- 4 Bird radar
- 5 Sonar / depth sounder
- 6 Info. from other vessel
- 7 Anchored FAD / payao (recorded)
-

"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either:
1. reported on; or
2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

- 1 Unassociated
- 2 Feeding on Baitfish
- 3 Drifting log, debris or dead animal
- 4 Drifting raft, FAD or payao
- 5 Anchored raft, FAD or payao
- 6 Live whale
- 7 Live whale shark
- 8 Other (please specify)
- 9 No tuna associated

} Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with NO school) (with school)		Free floating objects (no anchor) (with NO school) (with school)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY ?		
	Tally	No.	Tally	No.		Tally	No.	YES NO (circle one)
Example N/I								

OBSERVER'S DAILY LOG

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SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV.2018

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													SHIP's DATE	SHIP's TIME
1													UTC DATE	UTC TIME
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3													ACTIVITY and HELICOPTER CODES	
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													HOW DETECTED	
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													1 Unassociated	} Free schools
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	(with NO school)	(with school)	(with NO school)	(with school)		YES NO	Journal
Example N/I/ 6	Tally	Tally	Tally	Tally	Tally	YES NO (circle one)	pg #
	No.	No.	No.	No.	No.		

OBSERVER'S DAILY LOG

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OBSERVER'S DAILY LOG

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SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV.2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF
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SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)		SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and Set No. - from PS-3)	START OF DAY	
							DATE	TIME					SHIP's DATE	SHIP's TIME
1														
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23														

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

- 1 Set
- 2 Searching
- 3 Transit
- 4 No fishing - Breakdown
- 5 No fishing - Bad weather
- 6 In port - please specify
- 7 Net cleaning set
- 8 Investigate free school
- 9 Investigate floating object
- 10D Deploy - raft, FAD or payao
- 10R Retrieve - raft, FAD or payao
- 11 Drifting at day's end
- 12 Drifting with floating object
- 13 Other reason (specify)
- 14 Drifting -With fish aggregating lights
- 15R Retrieve radio buoy
- 15D Deploy radio buoy
- 16 Transshipping or bunkering
- 17 Servicing FAD or floating object
- 18 Drifting - No fishing
- H1 Helicopter takes off to search
- H2 Helicopter returned from search
-

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ?
- use first line for 15R and next for 15D

HOW DETECTED

- 1 Seen from vessel
- 2 Seen from helicopter
- 3 Marked with beacon
- 4 Bird radar
- 5 Sonar / depth sounder
- 6 Info. from other vessel
- 7 Anchored FAD / payao (recorded)
-

"Seen from helicopter"
Use when vessel gets to the school of tuna that helicopter either:
1. reported on; or
2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

- 1 Unassociated
- 2 Feeding on Baitfish
- 3 Drifting log, debris or dead animal
- 4 Drifting raft, FAD or payao
- 5 Anchored raft, FAD or payao
- 6 Live whale
- 7 Live whale shark
- 8 Other (please specify)
- 9 No tuna associated

} Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with NO school) (with school)		Free floating objects (no anchor) (with NO school) (with school)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY ?		
	Tally	No.	Tally	No.		Tally	No.	YES NO (circle one)
Example N/I								

OBSERVER'S DAILY LOG

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OBSERVER'S DAILY LOG

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SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV.2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF
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SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)		SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and Set No. - from PS-3)	START OF DAY	
							DATE	TIME					SHIP's DATE	SHIP's TIME
1														
2														
3														
4														
5														
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23														

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

- 1 Set
- 2 Searching
- 3 Transit
- 4 No fishing - Breakdown
- 5 No fishing - Bad weather
- 6 In port - please specify
- 7 Net cleaning set
- 8 Investigate free school
- 9 Investigate floating object
- 10D Deploy - raft, FAD or payao
- 10R Retrieve - raft, FAD or payao
- 11 Drifting at day's end
- 12 Drifting with floating object
- 13 Other reason (specify)
- 14 Drifting -With fish aggregating lights
- 15R Retrieve radio buoy
- 15D Deploy radio buoy
- 16 Transshipping or bunkering
- 17 Servicing FAD or floating object
- 18 Drifting - No fishing
- H1 Helicopter takes off to search
- H2 Helicopter returned from search
-

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ?
- use first line for 15R and next for 15D

HOW DETECTED

- 1 Seen from vessel
- 2 Seen from helicopter
- 3 Marked with beacon
- 4 Bird radar
- 5 Sonar / depth sounder
- 6 Info. from other vessel
- 7 Anchored FAD / payao (recorded)
-

"Seen from helicopter"
Use when vessel gets to the school of tuna that helicopter either:
1. reported on; or
2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

- 1 Unassociated
- 2 Feeding on Baitfish
- 3 Drifting log, debris or dead animal
- 4 Drifting raft, FAD or payao
- 5 Anchored raft, FAD or payao
- 6 Live whale
- 7 Live whale shark
- 8 Other (please specify)
- 9 No tuna associated

} Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with NO school) (with school)		Free floating objects (no anchor) (with NO school) (with school)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY ?		
	Tally	No.	Tally	No.		Tally	No.	YES NO (circle one)
Example N/I								

OBSERVER'S DAILY LOG

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SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV.2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF
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SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)		SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and Set No. - from PS-3)	START OF DAY	
							DATE	TIME					SHIP's DATE	SHIP's TIME
1														
2														
3														
4														
5														
6														
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22														
23														

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

- 1 Set
- 2 Searching
- 3 Transit
- 4 No fishing - Breakdown
- 5 No fishing - Bad weather
- 6 In port - please specify
- 7 Net cleaning set
- 8 Investigate free school
- 9 Investigate floating object
- 10D Deploy - raft, FAD or payao
- 10R Retrieve - raft, FAD or payao
- 11 Drifting at day's end
- 12 Drifting with floating object
- 13 Other reason (specify)
- 14 Drifting -With fish aggregating lights
- 15R Retrieve radio buoy
- 15D Deploy radio buoy
- 16 Transshipping or bunkering
- 17 Servicing FAD or floating object
- 18 Drifting - No fishing
- H1 Helicopter takes off to search
- H2 Helicopter returned from search
-

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ?
- use first line for 15R and next for 15D

HOW DETECTED

- 1 Seen from vessel
- 2 Seen from helicopter
- 3 Marked with beacon
- 4 Bird radar
- 5 Sonar / depth sounder
- 6 Info. from other vessel
- 7 Anchored FAD / payao (recorded)
-

"Seen from helicopter"
Use when vessel gets to the school of tuna that helicopter either:
1. reported on; or
2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

- 1 Unassociated
- 2 Feeding on Baitfish
- 3 Drifting log, debris or dead animal
- 4 Drifting raft, FAD or payao
- 5 Anchored raft, FAD or payao
- 6 Live whale
- 7 Live whale shark
- 8 Other (please specify)
- 9 No tuna associated

} Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with NO school) (with school)		Free floating objects (no anchor) (with NO school) (with school)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY ?		
	Tally	No.	Tally	No.		Tally	No.	YES NO (circle one)
Example N/I								

OBSERVER'S DAILY LOG

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OBSERVER'S DAILY LOG

<p><u>Observer Name</u> and <u>Vessel Name</u> : Always print each of these names out in full (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")</p> <p><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").</p>	<p><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 <u>1 of 36</u>", the fourth page, "Page <u>4 of 36</u>" and the last page will be "Page <u>36 of 36</u>").</p>
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SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV.2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF
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SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)		SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and Set No. - from PS-3)	START OF DAY	
							DATE	TIME					SHIP's DATE	SHIP's TIME
1														
2														
3														
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23														

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

- 1 Set
- 2 Searching
- 3 Transit
- 4 No fishing - Breakdown
- 5 No fishing - Bad weather
- 6 In port - please specify
- 7 Net cleaning set
- 8 Investigate free school
- 9 Investigate floating object
- 10D Deploy - raft, FAD or payao
- 10R Retrieve - raft, FAD or payao
- 11 Drifting at day's end
- 12 Drifting with floating object
- 13 Other reason (specify)
- 14 Drifting -With fish aggregating lights
- 15R Retrieve radio buoy
- 15D Deploy radio buoy
- 16 Transshipping or bunkering
- 17 Servicing FAD or floating object
- 18 Drifting - No fishing
- H1 Helicopter takes off to search
- H2 Helicopter returned from search
-

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ?
- use first line for 15R and next for 15D

HOW DETECTED

- 1 Seen from vessel
- 2 Seen from helicopter
- 3 Marked with beacon
- 4 Bird radar
- 5 Sonar / depth sounder
- 6 Info. from other vessel
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-

"Seen from helicopter"
Use when vessel gets to the school of tuna that helicopter either:
1. reported on; or
2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

- 1 Unassociated
- 2 Feeding on Baitfish
- 3 Drifting log, debris or dead animal
- 4 Drifting raft, FAD or payao
- 5 Anchored raft, FAD or payao
- 6 Live whale
- 7 Live whale shark
- 8 Other (please specify)
- 9 No tuna associated

} Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with NO school) (with school)		Free floating objects (no anchor) (with NO school) (with school)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY ?		
	Tally	No.	Tally	No.		Tally	No.	YES NO (circle one)
Example N/I								

OBSERVER'S DAILY LOG

<p><u>Observer Name</u> and <u>Vessel Name</u>: Always print each of these names out in full (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")</p> <p><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").</p>	<p><u>Page of</u>: Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc.</p> <p>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 <u>1 of 36</u>", the fourth page, "Page <u>4 of 36</u>" and the last page will be "Page <u>36 of 36</u>").</p>
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SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV.2018

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} Free schools

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OBSERVER'S DAILY LOG

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													4 Drifting raft, FAD or payao	
													5 Anchored raft, FAD or payao	
													6 Live whale	
													7 Live whale shark	
													8 Other (please specify)	
													9 No tuna associated	

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects		Free floating objects (no anchor)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY ?	
	(with NO school)	(with school)	(with NO school)	(with school)		YES NO	Journal
Example N/I/ 6	Tally	Tally	Tally	Tally	Tally	YES NO (circle one)	pg #
	No.	No.	No.	No.	No.		

OBSERVER'S DAILY LOG

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SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV.2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF
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SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)		SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and Set No. - from PS-3)	START OF DAY	
							DATE	TIME					SHIP's DATE	SHIP's TIME
1														
2														
3														
4														
5														
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22														
23														

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

- 1 Set
- 2 Searching
- 3 Transit
- 4 No fishing - Breakdown
- 5 No fishing - Bad weather
- 6 In port - please specify
- 7 Net cleaning set
- 8 Investigate free school
- 9 Investigate floating object
- 10D Deploy - raft, FAD or payao
- 10R Retrieve - raft, FAD or payao
- 11 Drifting at day's end
- 12 Drifting with floating object
- 13 Other reason (specify)
- 14 Drifting -With fish aggregating lights
- 15R Retrieve radio buoy
- 15D Deploy radio buoy
- 16 Transshipping or bunkering
- 17 Servicing FAD or floating object
- 18 Drifting - No fishing
- H1 Helicopter takes off to search
- H2 Helicopter returned from search
-

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ?
- use first line for 15R and next for 15D

HOW DETECTED

- 1 Seen from vessel
- 2 Seen from helicopter
- 3 Marked with beacon
- 4 Bird radar
- 5 Sonar / depth sounder
- 6 Info. from other vessel
- 7 Anchored FAD / payao (recorded)
-

"Seen from helicopter"
Use when vessel gets to the school of tuna that helicopter either:
1. reported on; or
2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

- 1 Unassociated
- 2 Feeding on Baitfish
- 3 Drifting log, debris or dead animal
- 4 Drifting raft, FAD or payao
- 5 Anchored raft, FAD or payao
- 6 Live whale
- 7 Live whale shark
- 8 Other (please specify)
- 9 No tuna associated

} Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with NO school) (with school)		Free floating objects (no anchor) (with NO school) (with school)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY ?		
	Tally	No.	Tally	No.		Tally	No.	YES NO (circle one)
Example N/I								

OBSERVER'S DAILY LOG

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SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV.2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF
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SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)		SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and Set No. - from PS-3)	START OF DAY	
							DATE	TIME					SHIP's DATE	SHIP's TIME
1														
2														
3														
4														
5														
6														
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21														
22														
23														

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

- 1 Set
- 2 Searching
- 3 Transit
- 4 No fishing - Breakdown
- 5 No fishing - Bad weather
- 6 In port - please specify
- 7 Net cleaning set
- 8 Investigate free school
- 9 Investigate floating object
- 10D Deploy - raft, FAD or payao
- 10R Retrieve - raft, FAD or payao
- 11 Drifting at day's end
- 12 Drifting with floating object
- 13 Other reason (specify)
- 14 Drifting -With fish aggregating lights
- 15R Retrieve radio buoy
- 15D Deploy radio buoy
- 16 Transshipping or bunkering
- 17 Servicing FAD or floating object
- 18 Drifting - No fishing
- H1 Helicopter takes off to search
- H2 Helicopter returned from search
-

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ?
- use first line for 15R and next for 15D

HOW DETECTED

- 1 Seen from vessel
- 2 Seen from helicopter
- 3 Marked with beacon
- 4 Bird radar
- 5 Sonar / depth sounder
- 6 Info. from other vessel
- 7 Anchored FAD / payao (recorded)
-

"Seen from helicopter"
Use when vessel gets to the school of tuna that helicopter either:
1. reported on; or
2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

- 1 Unassociated
- 2 Feeding on Baitfish
- 3 Drifting log, debris or dead animal
- 4 Drifting raft, FAD or payao
- 5 Anchored raft, FAD or payao
- 6 Live whale
- 7 Live whale shark
- 8 Other (please specify)
- 9 No tuna associated

} Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with NO school) (with school)		Free floating objects (no anchor) (with NO school) (with school)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY ?		
	Tally	No.	Tally	No.		Tally	No.	YES NO (circle one)
Example N/I								

OBSERVER'S DAILY LOG

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OBSERVER'S DAILY LOG

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<p><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.</p> <p><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. 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")</p> <p><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.</p> <p><u>Wind (kts)</u> (°): 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.</p> <p><u>Sea conditions (C-S-M-R-V)</u>. 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.</p> <p><u>Comments (and Set No. - from PS-3)</u> - for all activity code "1" write the set No. before the comments in this field. Get "set No." from the PS-3 that must be used every set.</p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Observers should record Ship's time in all other forms and paperwork.</p>
<p><u>Floating object and school sightings</u> : 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.</p> <p><u>Tally</u> : Mark with a stroke every time you sight something (see example on front)</p> <p><u>No</u> : Count the "tally" strokes at end of day to get the number of each type of sighting.</p>	<p><u>Activity and Helicopter Codes</u> : 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 <u>codes</u> 1, 8, 9 or <u>17</u> always use <u>school association</u> (<u>tuna</u>) and <u>how detected</u> codes, otherwise the school association (<u>tuna</u>) and how detected code fields must be dashed !</p> <p>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.</p> <p>If using code 16 remember that transhipment includes any transfer between vessels</p> <p>Use code 17 if making any repair or change to floating objects other than changing buoys</p> <p>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 (<u>named</u>) vessel, arrive from other (<u>named</u>) vessel, visit shore, rescue seaman, etc.</p>
<p><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.</p>	<p><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 first 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.</p> <p>Anchored FAD - use code 7 only if FAD is found because its position is recorded on chart.</p> <p><u>School Association (tuna)</u> : 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.</p>

SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV.2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF
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SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)		SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and Set No. - from PS-3)	START OF DAY	
							DATE	TIME					SHIP's DATE	SHIP's TIME
1														
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SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

- 1 Set
- 2 Searching
- 3 Transit
- 4 No fishing - Breakdown
- 5 No fishing - Bad weather
- 6 In port - please specify
- 7 Net cleaning set
- 8 Investigate free school
- 9 Investigate floating object
- 10D Deploy - raft, FAD or payao
- 10R Retrieve - raft, FAD or payao
- 11 Drifting at day's end
- 12 Drifting with floating object
- 13 Other reason (specify)
- 14 Drifting -With fish aggregating lights
- 15R Retrieve radio buoy
- 15D Deploy radio buoy
- 16 Transshipping or bunkering
- 17 Servicing FAD or floating object
- 18 Drifting - No fishing
- H1 Helicopter takes off to search
- H2 Helicopter returned from search
-

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ?
- use first line for 15R and next for 15D

HOW DETECTED

- 1 Seen from vessel
- 2 Seen from helicopter
- 3 Marked with beacon
- 4 Bird radar
- 5 Sonar / depth sounder
- 6 Info. from other vessel
- 7 Anchored FAD / payao (recorded)
-

"Seen from helicopter"
Use when vessel gets to the school of tuna that helicopter either:
1. reported on; or
2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

- 1 Unassociated
- 2 Feeding on Baitfish
- 3 Drifting log, debris or dead animal
- 4 Drifting raft, FAD or payao
- 5 Anchored raft, FAD or payao
- 6 Live whale
- 7 Live whale shark
- 8 Other (please specify)
- 9 No tuna associated

} Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with NO school) (with school)		Free floating objects (no anchor) (with NO school) (with school)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY ?		
	Tally	No.	Tally	No.		Tally	No.	YES NO (circle one)
Example N/I								

OBSERVER'S DAILY LOG

<p><u>Observer Name</u> and <u>Vessel Name</u>: Always print each of these names out in full (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")</p> <p><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").</p>	<p><u>Page of</u>: Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc.</p> <p>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 <u>1 of 36</u>", the fourth page, "Page <u>4 of 36</u>" and the last page will be "Page <u>36 of 36</u>").</p>
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FORM PS - 2

REV.2018

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SHIP's DATE	SHIP's TIME
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- H1 Helicopter takes off to search
- H2 Helicopter returned from search
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If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ?
- use first line for 15R and next for 15D

HOW DETECTED

- 1 Seen from vessel
- 2 Seen from helicopter
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"Seen from helicopter"
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SCHOOL ASSOCIATION (tuna)

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} Free schools

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	Tally	No.	Tally	No.		Tally	No.	YES NO (circle one)
Example N/I								

OBSERVER'S DAILY LOG

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SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV.2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE _____ OF _____
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	SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)	SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and Set No. - from PS-3)	START OF DAY	
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HOW DETECTED

1 Seen from vessel 2 Seen from helicopter 3 Marked with beacon 4 Bird radar 5 Sonar / depth sounder 6 Info. from other vessel 7 Anchored FAD / payao (recorded) ---	"Seen from helicopter" Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on
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SCHOOL ASSOCIATION (tuna)

1 Unassociated 2 Feeding on Baitfish 3 Drifting log, debris or dead animal 4 Drifting raft, FAD or payao 5 Anchored raft, FAD or payao 6 Live whale 7 Live whale shark 8 Other (please specify) 9 No tuna associated	} Free schools
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Example  <div style="float: right;">6</div>							

OBSERVER'S DAILY LOG

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SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV.2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF
---------------	-------------	-------------------------	---------

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							DATE	TIME					SHIP's DATE	SHIP's TIME
1														
2														
3														
4														
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22														
23														

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

- 1 Set
- 2 Searching
- 3 Transit
- 4 No fishing - Breakdown
- 5 No fishing - Bad weather
- 6 In port - please specify
- 7 Net cleaning set
- 8 Investigate free school
- 9 Investigate floating object
- 10D Deploy - raft, FAD or payao
- 10R Retrieve - raft, FAD or payao
- 11 Drifting at day's end
- 12 Drifting with floating object
- 13 Other reason (specify)
- 14 Drifting -With fish aggregating lights
- 15R Retrieve radio buoy
- 15D Deploy radio buoy
- 16 Transshipping or bunkering
- 17 Servicing FAD or floating object
- 18 Drifting - No fishing
- H1 Helicopter takes off to search
- H2 Helicopter returned from search
-

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ?
- use first line for 15R and next for 15D

HOW DETECTED

- 1 Seen from vessel
- 2 Seen from helicopter
- 3 Marked with beacon
- 4 Bird radar
- 5 Sonar / depth sounder
- 6 Info. from other vessel
- 7 Anchored FAD / payao (recorded)
-

"Seen from helicopter"
Use when vessel gets to the school of tuna that helicopter either:
1. reported on; or
2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

- 1 Unassociated
- 2 Feeding on Baitfish
- 3 Drifting log, debris or dead animal
- 4 Drifting raft, FAD or payao
- 5 Anchored raft, FAD or payao
- 6 Live whale
- 7 Live whale shark
- 8 Other (please specify)
- 9 No tuna associated

} Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with NO school) (with school)		Free floating objects (no anchor) (with NO school) (with school)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY ?		
	Tally	No.	Tally	No.		Tally	No.	YES NO (circle one)
Example N/I								

OBSERVER'S DAILY LOG

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							DATE	TIME					SHIP's DATE	SHIP's TIME
1														
2														
3														
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23														

SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

- 1 Set
- 2 Searching
- 3 Transit
- 4 No fishing - Breakdown
- 5 No fishing - Bad weather
- 6 In port - please specify
- 7 Net cleaning set
- 8 Investigate free school
- 9 Investigate floating object
- 10D Deploy - raft, FAD or payao
- 10R Retrieve - raft, FAD or payao
- 11 Drifting at day's end
- 12 Drifting with floating object
- 13 Other reason (specify)
- 14 Drifting -With fish aggregating lights
- 15R Retrieve radio buoy
- 15D Deploy radio buoy
- 16 Transshipping or bunkering
- 17 Servicing FAD or floating object
- 18 Drifting - No fishing
- H1 Helicopter takes off to search
- H2 Helicopter returned from search
-

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ?
- use first line for 15R and next for 15D

HOW DETECTED

- 1 Seen from vessel
- 2 Seen from helicopter
- 3 Marked with beacon
- 4 Bird radar
- 5 Sonar / depth sounder
- 6 Info. from other vessel
- 7 Anchored FAD / payao (recorded)
-

"Seen from helicopter"
Use when vessel gets to the school of tuna that helicopter either:
1. reported on; or
2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

- 1 Unassociated
- 2 Feeding on Baitfish
- 3 Drifting log, debris or dead animal
- 4 Drifting raft, FAD or payao
- 5 Anchored raft, FAD or payao
- 6 Live whale
- 7 Live whale shark
- 8 Other (please specify)
- 9 No tuna associated

} Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with NO school) (with school)		Free floating objects (no anchor) (with NO school) (with school)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY ?		
	Tally	No.	Tally	No.		Tally	No.	YES NO (circle one)
Example N/I								

OBSERVER'S DAILY LOG

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SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV.2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF
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SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)		SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and Set No. - from PS-3)	START OF DAY	
							DATE	TIME					SHIP's DATE	SHIP's TIME
1														
2														
3														
4														
5														
6														
7														
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SHIP's DATE	SHIP's TIME
UTC DATE	UTC TIME

ALL MUST BE RECORDED

ACTIVITY and HELICOPTER CODES

- 1 Set
- 2 Searching
- 3 Transit
- 4 No fishing - Breakdown
- 5 No fishing - Bad weather
- 6 In port - please specify
- 7 Net cleaning set
- 8 Investigate free school
- 9 Investigate floating object
- 10D Deploy - raft, FAD or payao
- 10R Retrieve - raft, FAD or payao
- 11 Drifting at day's end
- 12 Drifting with floating object
- 13 Other reason (specify)
- 14 Drifting -With fish aggregating lights
- 15R Retrieve radio buoy
- 15D Deploy radio buoy
- 16 Transshipping or bunkering
- 17 Servicing FAD or floating object
- 18 Drifting - No fishing
- H1 Helicopter takes off to search
- H2 Helicopter returned from search
-

If FAD involved be sure to fill out a GEN-5 Form - FAD and Floating Object Information Record

Changing buoys ?
- use first line for 15R and next for 15D

HOW DETECTED

- 1 Seen from vessel
- 2 Seen from helicopter
- 3 Marked with beacon
- 4 Bird radar
- 5 Sonar / depth sounder
- 6 Info. from other vessel
- 7 Anchored FAD / payao (recorded)
-

"Seen from helicopter"
Use when vessel gets to the school of tuna that helicopter either:
1. reported on; or
2. dropped buoy on

SCHOOL ASSOCIATION (tuna)

- 1 Unassociated
- 2 Feeding on Baitfish
- 3 Drifting log, debris or dead animal
- 4 Drifting raft, FAD or payao
- 5 Anchored raft, FAD or payao
- 6 Live whale
- 7 Live whale shark
- 8 Other (please specify)
- 9 No tuna associated

} Free schools

FLOATING OBJECT AND SCHOOL SIGHTINGS	Anchored floating objects (with NO school) (with school)		Free floating objects (no anchor) (with NO school) (with school)		Free schools	DID YOU OBSERVE ANY EVENTS TO RECORD ON FORM GEN-3 TODAY ?		
	Tally	No.	Tally	No.		Tally	No.	YES NO (circle one)
Example N/I								

OBSERVER'S DAILY LOG

<p><u>Observer Name</u> and <u>Vessel Name</u>: Always print each of these names out in full (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")</p> <p><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").</p>	<p><u>Page of</u>: Number Form PS-2's through trip as Page 1, Page 2, Page 3, etc.</p> <p>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 <u>1 of 36</u>", the fourth page, "Page <u>4 of 36</u>" and the last page will be "Page <u>36 of 36</u>").</p>
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SPC/FFA REGIONAL PURSE SEINE OBSERVER DAILY LOG

FORM PS - 2

REV.2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF
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SHIP'S TIME	LATITUDE (dd°mm.mmm')	N S	LONGITUDE (ddd°mm.mmm')	E W	EEZ CODE	ACTIVITY CODE	WIND (kts) (°)		SEA C-S-M-R-V	HOW DETECT	SCHOOL ASSOC	COMMENTS (and Set No. - from PS-3)	START OF DAY	
													SHIP's DATE	SHIP's TIME
1													UTC DATE	UTC TIME
2														
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SHIP's DATE	SHIP's TIME
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-

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HOW DETECTED

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- 3 Marked with beacon
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	Tally	No.	Tally	No.		Tally	No.	YES NO (circle one)
Example N/I								

OBSERVER'S DAILY LOG

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OBSERVER'S DAILY LOG

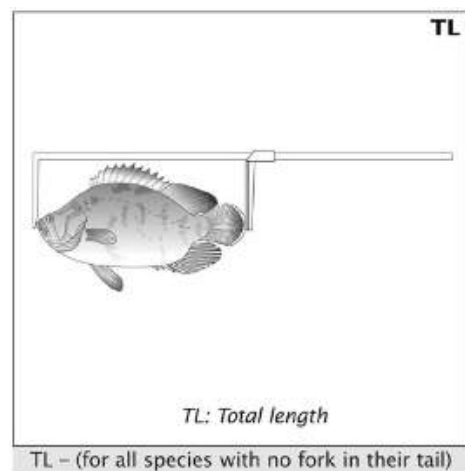
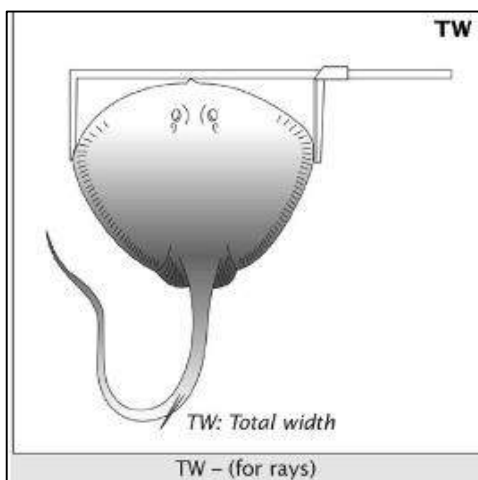
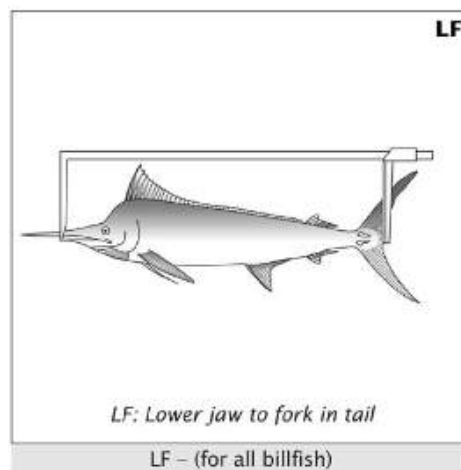
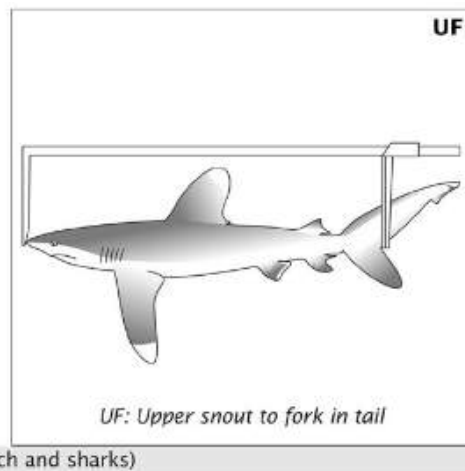
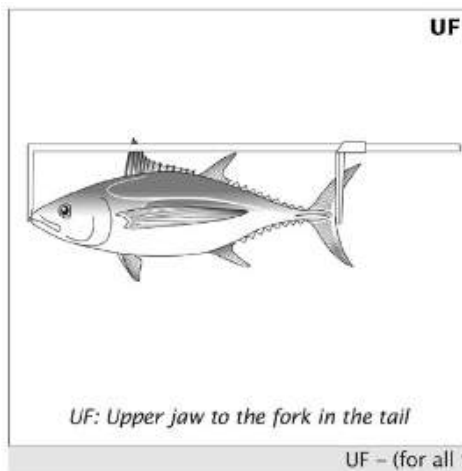
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OBSERVER'S DAILY LOG

<p><u>Observer Name</u> and <u>Vessel Name</u> : Always print each of these names out in full (e.g. an observer name "John Masa", and a vessel name "Hai Hsiang No. 959")</p> <p><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").</p>	<p><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 <u>1 of 36</u>", the fourth page, "Page <u>4 of 36</u>" and the last page will be "Page <u>36 of 36</u>").</p>
<p><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.</p> <p><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. 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")</p> <p><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.</p> <p><u>Wind (kts)</u> (°): 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.</p> <p><u>Sea conditions (C-S-M-R-V)</u>. 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.</p> <p><u>Comments (and Set No. - from PS-3)</u> - for all activity code "1" write the set No. before the comments in this field. Get "set No." from the PS-3 that must be used every set.</p>	<p>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.</p> <p>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.</p> <p><u>Activity and Helicopter Codes</u> : 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 <i>school association</i> (tuna) and <i>how detected</i> 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 (<i>named</i>) vessel, arrive from other (<i>named</i>) vessel, visit shore, rescue seaman, etc.</p>
<p><u>Floating object and school sightings</u> : 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. <u>Tally</u> : Mark with a stroke every time you sight something (see example on front) <u>No</u> : Count the "tally" strokes at end of day to get the number of each type of sighting.</p>	<p><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 first 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.</p>
<p><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.</p>	<p><u>School Association (tuna)</u> : 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.</p>

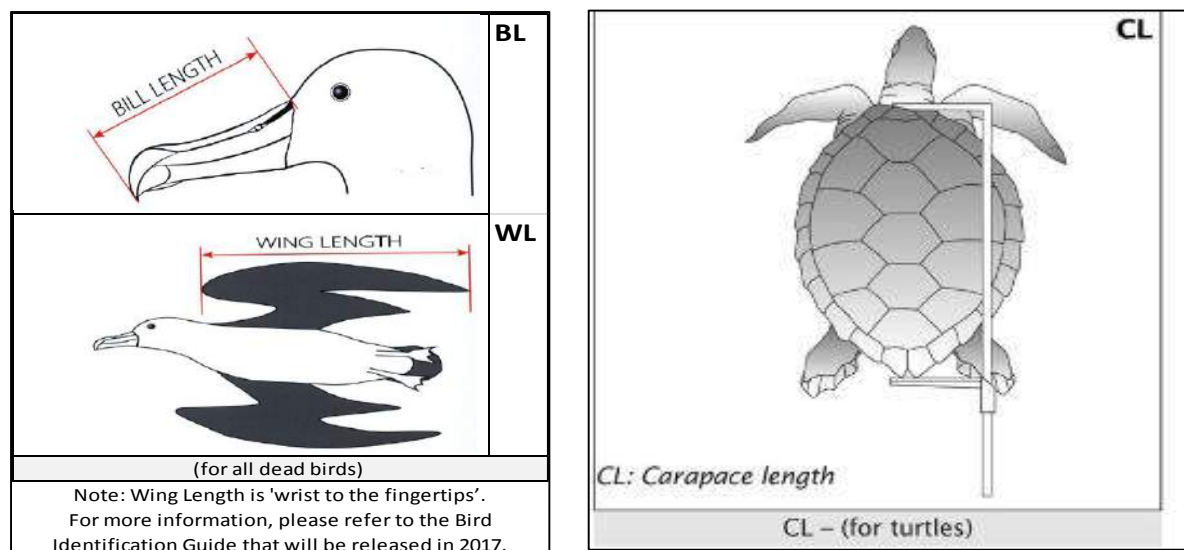
Purse-Seine Length Measurements

(You may only take these measurements on board a purse-seine vessel)



Purse-Seine Length Measurements

- For Species of Special interest -



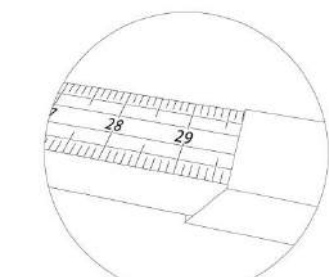
CALIBRATING CALLIPERS

Observers are asked to calibrate their callipers before every purse-seine set. This can be done by marking a known length on the deck. For instance use the ruler of the calliper (not the calliper itself) 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.

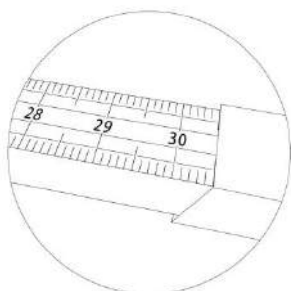


IF THE CORRECT CALLIPER READING IS 30 CM.

And the calliper correctly shows 30 cm, 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.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME			VESSEL NAME			PAGE OF			
						(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME			
		OBSERVER: (see PS-2)		YY	MM	DD	hh	mm	VESSEL LOG:

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS															
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded	
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \boxed{} \text{ mT}$		$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 2 brail} \end{array} \times \begin{array}{c} \boxed{} \end{array} \right) = \boxed{} \text{ mT}$		$\boxed{} \text{ mT} \text{ less bycatch (see below)} = \boxed{} \text{ mT} = \text{Total tuna catch}$		<div> <div>SKIP-JACK</div> <div>YES (%) NO</div> </div>		<div> <div>YELLOWFIN</div> <div>SMALL (< 75 cm) LARGE (> 75 cm)</div> <div>YES (%) NO</div> </div>				<div> <div>BIGEYE</div> <div>SMALL (< 75 cm) LARGE (> 75 cm)</div> <div>YES (%) NO</div> </div>			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)								Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)						
						Observer	FATE					
							a. (mT)					
						Vessel	FATE					
							(mT)					
						Observer	FATE					
							b. (mT)					
						Vessel	FATE					
							(mT)					
						Observer	FATE					
							c. (mT)					
						Vessel	FATE					
							(mT)					
Total weight of bycatch: mT						B. OBSERVER totals (mT) discards + RCC (a+b+c):						
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT		if not RWW	FATE			
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released				OBS (mT)					
							VES (mT)					
							FATE	RWW	RWW	RWW		
							OBS (mT)					
							VES (mT)					
Due to gear break bycatch mitigation								ESC	ESC	ESC		
								estimates	OBS (mT)			
									VES (mT)			
How many Tags were recovered?		Record species and tag numbers. Fill tag recovery forms!										

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ	Discarded - poor quality	(use these fate codes for any SSIs landed on deck)	
DOR	Discarded - other reasons (specify)		
ESC	Escaped		
DPA	Discarded Protected Species - Alive	ICR	Crew released from net
DPD	Discarded Protected Species - Dead	IBR	Broke through net
DPU	Discarded Protected Species - Unknown	IRN	Roped, pulled from net
		OTH	Other, please specify

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ? species and tag numbers	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

FORM PS - 3

REV. 2018

OBSERVER NAME			VESSEL NAME					PAGE		OF				
										(SET No.)				
OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME					START OF SET DATE AND TIME								
	OBSERVER:		YY	MM	DD	hh	mm	VESSEL LOG:		YY	MM	DD	hh	mm
	(see PS-2)													

		SET SEQUENCE TIMES					
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS												
brail capacity	sum of all brails	Total catch	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT <i>- circle YES or NO for each species</i>						<i>N.B.: these calculations include all the tuna in this catch, whether retained or discarded</i>			
<div style="border: 1px solid black; width: 60px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> <div style="margin: 0 5px;">x</div> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> </div> <div style="text-align: center; margin-top: 5px;">= <div style="border: 1px solid black; width: 60px; height: 20px; display: inline-block;"></div></div>	<div style="border: 1px solid black; width: 60px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> </div> <div style="text-align: center; margin-top: 5px;">less bycatch (see below)</div>	<div style="border: 1px solid black; width: 60px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> </div> <div style="text-align: center; margin-top: 5px;">= Total tuna catch</div>	➔									
			SKIP-JACK		YELLOWFIN				BIGEYE			
			SMALL (< 75 cm)		LARGE (> 75 cm)			SMALL (< 75 cm)		LARGE (> 75 cm)		
<div style="display: flex; justify-content: space-between;"> <div>Type 1 brail (see PS-1 form)</div> <div>+</div> <div>Type 2 brail</div> </div>			<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div>		<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div>		<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div>		<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div>		<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div>	
<div style="display: flex; justify-content: space-between;"> <div>Type 1 brail (see PS-1 form)</div> <div>x</div> <div>Type 2 brail</div> </div>			<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div>		<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div>		<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div>		<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div>		<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div>	

SKJ YFT BET

SPECIES CODE	FATE CODE	OBSERVER (mT) No.		VESSEL LOG (mT) No.		SSI CONDITION CAUGHT / DISCARD		COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)		SKJ	YFI	BEI
									Observer	FATE			
										a. (mT)			
									Vessel	FATE			
										(mT)			
									Observer	FATE			
										b. (mT)			
									Vessel	FATE			
										(mT)			
									Observer	FATE			
										c. (mT)			
									Vessel	FATE			
										(mT)			
									Observer	FATE			
										(mT)			
Total weight of bycatch: mT				mT					B. OBSERVER totals (mT) discards + RCC (a+b+c):				
SPECIES OF SPECIAL INTEREST <i>Interactions with primary gear (not landed)</i>						COMMENTS / SSI TREATMENT			if not RWW	FATE			
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.		CONDITION Captured Released						OBS (mT)			
									VES (mT)				
									Tuna kept onboard for later unload	FATE	RWW	RWW	RWW
										OBS (mT)			
										VES (mT)			
									Due to gear break bycatch mitigation		ESC	ESC	ESC
									estimates	OBS (mT)			
How many Tags were recovered?				Record species and tag numbers. Fill tag recovery forms!						VES (mT)			

FATE CODES						
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES IEN - Entangled (in gear) IJO - Jumped out (over net) IBR - Broke through net IRN - Roped, pulled from net OTH - Other, please specify
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		
ROR	Retained - other reason (specify)	DSO	Discarded - shark damage	DPD - Discarded Protected Species - Dead		
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	Observer (PS-2)	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.
START of SET DATE and TIME	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ? species and tag numbers	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF							
								(SET No.)							
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME						START OF SET DATE AND TIME							
		OBSERVER:		YY	MM	DD	hh	mm	VESSEL LOG:		YY	MM	DD	hh	mm
		(see PS-2)													

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS															
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded	
$\left(\begin{matrix} \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{matrix} \times \begin{matrix} \text{Type 2 brail} \\ \text{(see PS-4 form)} \end{matrix} \right) = \text{less bycatch (see below)} \\ + \\ \left(\begin{matrix} \text{Type 2 brail} \\ \text{(see PS-4 form)} \end{matrix} \times \begin{matrix} \text{Type 2 brail} \\ \text{(see PS-4 form)} \end{matrix} \right) = \text{Total tuna catch}$						SKIP-JACK		YELLOWFIN				BIGEYE			
								SMALL (< 75 cm)		LARGE (> 75 cm)		SMALL (< 75 cm)		LARGE (> 75 cm)	
						YES (%)		YES (%)		YES (%)		YES (%)		YES (%)	
						NO		NO		NO		NO		NO	

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ YFT BET			
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)									
											Observer	FATE			
												a. (mT)			
											Vessel	FATE			
												(mT)			
											Observer	FATE			
												b. (mT)			
											Vessel	FATE			
												(mT)			
											Observer	FATE			
												c. (mT)			
											Vessel	FATE			
												(mT)			
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):									
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT									
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released								if not RWW	FATE			
												OBS (mT)			
											VES (mT)				
											Tuna kept onboard for later unload	FATE	RWW	RWW	RWW
												OBS (mT)			
												VES (mT)			
						Due to gear break bycatch mitigation						ESC	ESC	ESC	
											estimates	OBS (mT)			
												VES (mT)			
How many Tags were recovered?						Record species and tag numbers. Fill tag recovery forms!									

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ Discarded - poor quality		DPA - Discarded Protected Species - Alive	
DOR Discarded - other reasons (specify)		DPD - Discarded Protected Species - Dead	
ESC Escaped		DPU - Discarded Protected Species - Unknown	
(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net	
		IBR - Broke through net	
		IRN - Roped, pulled from net	
		OTH - Other, please specify	

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

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OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																							
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded																									
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \boxed{} \text{ mT}$						<div style="display: flex; justify-content: space-around;"> <div> SKIP-JACK <table border="1"> <tr> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> </tr> </table> </div> <div> YELLOWFIN <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> <div> BIGEYE <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> </div>				YES	(%)	NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO			
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$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 2 brail} \end{array} \times \begin{array}{c} \boxed{} \end{array} \right) = \boxed{} \text{ mT}$		less bycatch (see below)																																					
				= Total tuna catch																																			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								b. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								c. (mT)						
							Vessel	FATE						
								(mT)						
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT				if not RWW	FATE			
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released								OBS (mT)			
										VES (mT)				
										FATE	RWW	RWW	RWW	
										OBS (mT)				
										VES (mT)				
						Due to gear break bycatch mitigation				ESC	ESC	ESC		
										OBS (mT)				
										VES (mT)				
How many Tags were recovered?		Record species and tag numbers. Fill tag recovery forms!								estimates				

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ	Discarded - poor quality	(use these fate codes for any SSIs landed on deck)	
DOR	Discarded - other reasons (specify)		
ESC	Escaped		
DPA	Discarded Protected Species - Alive	ICR	Crew released from net
DPD	Discarded Protected Species - Dead	IBR	Broke through net
DPU	Discarded Protected Species - Unknown	IRN	Roped, pulled from net
		OTH	Other, please specify

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS															
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded	
$\left(\begin{matrix} \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{matrix} \times \begin{matrix} \text{Type 2 brail} \\ \text{(see PS-4 form)} \end{matrix} \right) = \text{less bycatch (see below)}$		$\left(\begin{matrix} \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{matrix} \times \begin{matrix} \text{Type 2 brail} \\ \text{(see PS-4 form)} \end{matrix} \right) = \text{Total tuna catch}$		$\left(\begin{matrix} \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{matrix} \times \begin{matrix} \text{Type 2 brail} \\ \text{(see PS-4 form)} \end{matrix} \right) = \text{Total tuna catch}$		SKIP-JACK YES (%) NO YES (%) NO		YELLOWFIN SMALL (< 75 cm) LARGE (> 75 cm) YES (%) YES (%) YES (%) NUMBER YES (%) YES (%) YES (%) NUMBER				BIGEYE SMALL (< 75 cm) LARGE (> 75 cm) YES (%) YES (%) YES (%) NUMBER YES (%) YES (%) YES (%) NUMBER			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
						Observer	FATE							
							a. (mT)							
						Vessel	FATE							
							(mT)							
						Observer	FATE							
							b. (mT)							
						Vessel	FATE							
							(mT)							
						Observer	FATE							
							c. (mT)							
						Vessel	FATE							
							(mT)							
Total weight of bycatch: mT						B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT								
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released			if not RWW	FATE							
							OBS (mT)							
						Tuna kept onboard for later unload	VES (mT)							
							FATE	RWW	RWW	RWW				
						OBS (mT)								
							VES (mT)							
						Due to gear break bycatch mitigation		ESC	ESC	ESC				
						estimates	OBS (mT)							
							VES (mT)							
How many Tags were recovered?						Record species and tag numbers. Fill tag recovery forms!								

FATE CODES									
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES			
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)			
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)			
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net			
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net			
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		IRN - Roped, pulled from net			
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		OTH - Other, please specify			

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																							
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded																									
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \boxed{} \text{ mT}$						<div style="display: flex; justify-content: space-around;"> <div> SKIP-JACK <table border="1"> <tr> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> </tr> </table> </div> <div> YELLOWFIN <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> <div> BIGEYE <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> </div>				YES	(%)	NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO			
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BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								b. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								c. (mT)						
							Vessel	FATE						
								(mT)						
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT		if not RWW	FATE					
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released				OBS (mT)							
							Tuna kept onboard for later unload	VES (mT)						
								FATE	RWW	RWW	RWW			
								OBS (mT)						
							Due to gear break bycatch mitigation	VES (mT)						
								ESC	ESC	ESC				
How many Tags were recovered?						Record species and tag numbers. Fill tag recovery forms!		estimates	OBS (mT)					
									VES (mT)					

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ Discarded - poor quality		DPA - Discarded Protected Species - Alive	
DOR Discarded - other reasons (specify)		DPD - Discarded Protected Species - Dead	
ESC Escaped		DPU - Discarded Protected Species - Unknown	
(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net	
		IBR - Broke through net	
		IRN - Roped, pulled from net	
		OTH - Other, please specify	

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ? species and tag numbers	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																							
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded																									
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \boxed{} \text{ mT}$						<div style="display: flex; justify-content: space-around;"> <div> SKIP-JACK <table border="1"> <tr> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> </tr> </table> </div> <div> YELLOWFIN <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> <div> BIGEYE <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> </div>				YES	(%)	NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO			
YES	(%)																																						
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YES	(%)	YES	(%)																																				
NO		NO																																					
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 2 brail} \end{array} \times \begin{array}{c} \boxed{} \end{array} \right) = \boxed{} \text{ mT}$		less bycatch (see below)		= Total tuna catch																																			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								b. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								c. (mT)						
							Vessel	FATE						
								(mT)						
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT		if not RWW	FATE					
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released				OBS (mT)							
							Tuna kept onboard for later unload	VES (mT)						
								FATE	RWW	RWW	RWW			
								OBS (mT)						
							Due to gear break bycatch mitigation	VES (mT)						
								ESC	ESC	ESC				
How many Tags were recovered?						Record species and tag numbers. Fill tag recovery forms!		estimates	OBS (mT)					
									VES (mT)					

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ Discarded - poor quality		DPA - Discarded Protected Species - Alive	
DOR Discarded - other reasons (specify)		DPD - Discarded Protected Species - Dead	
ESC Escaped		DPU - Discarded Protected Species - Unknown	
(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net	
		IBR - Broke through net	
		IRN - Roped, pulled from net	
		OTH - Other, please specify	

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.	
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ? species and tag numbers	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS															
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded	
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \begin{array}{c} \boxed{} \text{ mT} \\ \text{less bycatch (see below)} \end{array}$		$+ \begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 2 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} = \begin{array}{c} \boxed{} \text{ mT} \\ \text{= Total tuna catch} \end{array}$		→		SKIP-JACK		YELLOWFIN				BIGEYE			
								SMALL (< 75 cm)		LARGE (> 75 cm)		SMALL (< 75 cm)		LARGE (> 75 cm)	
						YES (%)		YES (%)		YES (%)		YES (%)		YES (%)	
						NO		NO		NO		NO		NO	

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET	
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)									
											Observer	FATE			
												a. (mT)			
											Vessel	FATE			
												(mT)			
											Observer	FATE			
												b. (mT)			
											Vessel	FATE			
												(mT)			
											Observer	FATE			
												c. (mT)			
											Vessel	FATE			
												(mT)			
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):									
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT					if not RWW	FATE			
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released									OBS (mT)			
											VES (mT)				
											Tuna kept onboard for later unload	FATE	RWW	RWW	RWW
												OBS (mT)			
											VES (mT)				
						Due to gear break bycatch mitigation					ESC	ESC	ESC		
											estimates	OBS (mT)			
												VES (mT)			
How many Tags were recovered?						Record species and tag numbers. Fill tag recovery forms!									

FATE CODES									
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES			
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)			
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)			
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net			
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net			
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		IRN - Roped, pulled from net			
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		OTH - Other, please specify			

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																			
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded					
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \begin{array}{c} \boxed{} \text{ mT} \\ \text{less bycatch (see below)} \end{array}$						→		SKIP-JACK				YELLOWFIN				BIGEYE			
								SMALL (< 75 cm)		LARGE (> 75 cm)		SMALL (< 75 cm)		LARGE (> 75 cm)					
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 2 brail} \end{array} \times \begin{array}{c} \boxed{} \end{array} \right) = \begin{array}{c} \boxed{} \text{ mT} \\ \text{= Total tuna catch} \end{array}$								YES (%)		YES (%)		YES (%)		YES (%)		YES (%)			
						NO		NO		NO		NO		NO		NO			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ YFT BET		
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								b. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								c. (mT)						
							Vessel	FATE						
								(mT)						
Total weight of bycatch:		mT		mT		B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT								
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released				if not RWW	FATE						
								OBS (mT)						
							Tuna kept onboard for later unload	VES (mT)						
								FATE		RWW	RWW	RWW		
								OBS (mT)						
								VES (mT)						
						Due to gear break bycatch mitigation					ESC	ESC	ESC	
							estimates	OBS (mT)						
								VES (mT)						
How many Tags were recovered?						Record species and tag numbers. Fill tag recovery forms!								

FATE CODES									
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES			
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)			
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)			
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net			
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net			
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		IRN - Roped, pulled from net			
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		OTH - Other, please specify			

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
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	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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.	
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TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

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FORM PS - 3

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OBSERVER NAME	VESSEL NAME	PAGE OF (SET No.)
OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME OBSERVER: (see PS-2) YY MM DD hh mm	START OF SET DATE AND TIME VESSEL LOG: YY MM DD hh mm

		SET SEQUENCE TIMES					
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																																								
brail capacity	sum of all brails	Total catch	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT <i>- circle YES or NO for each species</i>						<i>N.B.: these calculations include all the tuna in this catch, whether retained or discarded</i>																																															
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SKJ YFT BET

SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)
						Observer FATE
						a. (mT)
						Vessel FATE
						(mT)
						Observer FATE
						b. (mT)
						Vessel FATE
						(mT)
						Observer FATE
						c. (mT)
						Vessel FATE
						(mT)
Total weight of bycatch:	mT		mT		B. OBSERVER totals (mT) discards + RCC	(a+b+c):
SPECIES OF SPECIAL INTEREST <i>Interactions with primary gear (not landed)</i>						COMMENTS / SSI TREATMENT
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released			Tuna kept onboard for later unload if not RWW
						FATE
						OBS (mT)
						VES (mT)
						FATE
						RWW
						OBS (mT)
						VES (mT)
					Due to gear break bycatch mitigation	ESC
						ESC
						ESC
How many Tags were recovered?						Record species and tag numbers. Fill tag recovery forms!
						estimates
						OBS (mT)
						VES (mT)

FATE CODES						
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES IEN - Entangled (in gear) IJO - Jumped out (over net) ICR - Crew released from net IBR - Broke through net IRN - Roped, pulled from net OTH - Other, please specify
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

FORM PS - 3

REV. 2018

[illegible]

		SET SEQUENCE TIMES					
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																																											
brail capacity	sum of all brails	Total catch	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT <i>- circle YES or NO for each species</i>						<i>N.B.: these calculations include all the tuna in this catch, whether retained or discarded</i>																																																		
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SKJ YFT BET

SPECIES CODE	FATE CODE	OBSERVER (mT) No.		VESSEL LOG (mT) No.		SSI CONDITION CAUGHT / DISCARD		COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)				
									Observer	FATE			
										a. (mT)			
									Vessel	FATE			
										(mT)			
									Observer	FATE			
										b. (mT)			
									Vessel	FATE			
										(mT)			
									Observer	FATE			
										c. (mT)			
									Vessel	FATE			
										(mT)			

Total weight of bycatch:

mT

mT

B. OBSERVER totals (mT)
discards + RCC (a+b+c):

$$(a+b+c):$$

Interactions with primary gear (not landed)

COMMENTS / SSI TREATMENT

Interactions with primary gear (not landed)										Tuna kept onboard for later unloading	if not RWW			
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released						OBS (mT)					
										VES (mT)				
										FATE	RWW	RWW	RWW	
										OBS (mT)				
										VES (mT)				
								Due to gear break bycatch mitigation		ESC	ESC	ESC		
										estimates	OBS (mT)			
How many Tags were recovered?					Record species and tag numbers. Fill tag recovery forms!						VES (mT)			

FATE CODES						
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES IEN - Entangled (in gear) IJO - Jumped out (over net) IBR - Broke through net IRN - Roped, pulled from net OTH - Other, please specify
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		
ROR	Retained - other reason (specify)	DSO	Discarded - shark damage	DPD - Discarded Protected Species - Dead		
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																							
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded																									
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \boxed{} \text{ mT}$						<div style="display: flex; justify-content: space-around;"> <div> SKIP-JACK <table border="1"> <tr> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> </tr> </table> </div> <div> YELLOWFIN <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> <div> BIGEYE <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> </div>				YES	(%)	NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO			
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$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 2 brail} \end{array} \times \begin{array}{c} \boxed{} \end{array} \right) = \boxed{} \text{ mT}$		less bycatch (see below)																																					
				= Total tuna catch																																			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								b. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								c. (mT)						
							Vessel	FATE						
								(mT)						
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT					if not RWW	FATE		
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released									OBS (mT)		
											VES (mT)			
											FATE	RWW	RWW	RWW
											OBS (mT)			
											VES (mT)			
						Due to gear break bycatch mitigation					ESC	ESC	ESC	
											OBS (mT)			
											VES (mT)			
How many Tags were recovered?						Record species and tag numbers. Fill tag recovery forms!					estimates			

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ	Discarded - poor quality	(use these fate codes for any SSIs landed on deck)	
DOR	Discarded - other reasons (specify)		
ESC	Escaped		
DPA	Discarded Protected Species - Alive	ICR	Crew released from net
DPD	Discarded Protected Species - Dead	IBR	Broke through net
DPU	Discarded Protected Species - Unknown	IRN	Roped, pulled from net
		OTH	Other, please specify

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.	
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS															
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded	
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \begin{array}{c} \boxed{} \text{ mT} \\ \text{less bycatch (see below)} \end{array}$		$+ \begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 2 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} = \begin{array}{c} \boxed{} \text{ mT} \\ \text{= Total tuna catch} \end{array}$		→		SKIP-JACK		YELLOWFIN				BIGEYE			
								SMALL (< 75 cm)		LARGE (> 75 cm)		SMALL (< 75 cm)		LARGE (> 75 cm)	
						YES (%)		YES (%)		YES (%)		YES (%)		YES (%)	
						NO		NO		NO		NO		NO	

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)								Target Tunas		SKJ YFT BET		
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)						
						Observer	FATE					
							a. (mT)					
						Vessel	FATE					
							(mT)					
						Observer	FATE					
							b. (mT)					
						Vessel	FATE					
							(mT)					
						Observer	FATE					
							c. (mT)					
						Vessel	FATE					
							(mT)					
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):						
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT						
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released			Tuna kept onboard for later unload if not RWW	FATE					
							OBS (mT)					
						VES (mT)						
							FATE	RWW	RWW	RWW		
						OBS (mT)						
							VES (mT)					
						Due to gear break bycatch mitigation		ESC	ESC	ESC		
						estimates	OBS (mT)					
							VES (mT)					
How many Tags were recovered?		Record species and tag numbers. Fill tag recovery forms!										

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ Discarded - poor quality		DPA - Discarded Protected Species - Alive	
DOR Discarded - other reasons (specify)		DPD - Discarded Protected Species - Dead	
ESC Escaped		DPU - Discarded Protected Species - Unknown	
(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net	
		IBR - Broke through net	
		IRN - Roped, pulled from net	
		OTH - Other, please specify	

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																							
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded																									
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \boxed{} \text{ mT}$						<div style="display: flex; justify-content: space-around;"> <div> SKIP-JACK <table border="1"> <tr> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> </tr> </table> </div> <div> YELLOWFIN <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> <div> BIGEYE <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> </div>				YES	(%)	NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO			
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$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 2 brail} \end{array} \times \begin{array}{c} \boxed{} \end{array} \right) = \boxed{} \text{ mT}$		less bycatch (see below)																																					
				= Total tuna catch																																			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								b. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								c. (mT)						
							Vessel	FATE						
								(mT)						
Total weight of bycatch: mT						B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT					FATE			
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released											
							if not RWW	OBS (mT)						
								VES (mT)						
							Tuna kept onboard for later unload	FATE	RWW	RWW	RWW			
								OBS (mT)						
								VES (mT)						
						Due to gear break bycatch mitigation					ESC	ESC	ESC	
							estimates	OBS (mT)						
								VES (mT)						
How many Tags were recovered?		Record species and tag numbers. Fill tag recovery forms!												

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ	Discarded - poor quality	(use these fate codes for any SSIs landed on deck)	
DOR	Discarded - other reasons (specify)		
ESC	Escaped		
DPA	Discarded Protected Species - Alive	ICR	Crew released from net
DPD	Discarded Protected Species - Dead	IBR	Broke through net
DPU	Discarded Protected Species - Unknown	IRN	Roped, pulled from net
		OTH	Other, please specify

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																							
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded																									
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \boxed{} \text{ mT}$						<div style="display: flex; justify-content: space-around;"> <div> SKIP-JACK <table border="1"> <tr> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> </tr> </table> </div> <div> YELLOWFIN <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> <div> BIGEYE <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> </div>				YES	(%)	NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO			
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				= Total tuna catch																																			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								b. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								c. (mT)						
							Vessel	FATE						
								(mT)						
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST <i>Interactions with primary gear (not landed)</i>						COMMENTS / SSI TREATMENT		if not RWW	FATE					
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released											
							Tuna kept onboard for later unload	OBS (mT)						
								VES (mT)						
								FATE	RWW	RWW	RWW			
								OBS (mT)						
								VES (mT)						
						Due to gear break bycatch mitigation			ESC	ESC	ESC			
						estimates		OBS (mT)						
								VES (mT)						
How many Tags were recovered?		Record species and tag numbers. Fill tag recovery forms!												

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ Discarded - poor quality		DPA - Discarded Protected Species - Alive	
DOR Discarded - other reasons (specify)		DPD - Discarded Protected Species - Dead	
ESC Escaped		DPU - Discarded Protected Species - Unknown	
(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net	
		IBR - Broke through net	
		IRN - Roped, pulled from net	
		OTH - Other, please specify	

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS															
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded	
$\left(\begin{matrix} \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{matrix} \times \begin{matrix} \text{Type 2 brail} \\ \text{(see PS-4 form)} \end{matrix} \right) = \text{less bycatch (see below)}$		$\left(\begin{matrix} \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{matrix} \times \begin{matrix} \text{Type 2 brail} \\ \text{(see PS-4 form)} \end{matrix} \right) = \text{Total tuna catch}$		$\text{less bycatch (see below)} = \text{Total tuna catch}$		$\text{less bycatch (see below)} = \text{Total tuna catch}$		$\text{less bycatch (see below)} = \text{Total tuna catch}$		$\text{less bycatch (see below)} = \text{Total tuna catch}$		$\text{less bycatch (see below)} = \text{Total tuna catch}$		$\text{less bycatch (see below)} = \text{Total tuna catch}$	
						SKIP-JACK		YELLOWFIN				BIGEYE			
								SMALL (< 75 cm)		LARGE (> 75 cm)		SMALL (< 75 cm)		LARGE (> 75 cm)	
						YES (%)		YES (%)		YES (%)		YES (%)		YES (%)	
						NO		NO		NO		NO		NO	

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
											Observer	FATE		
												a. (mT)		
											Vessel	FATE		
												(mT)		
											Observer	FATE		
												b. (mT)		
											Vessel	FATE		
												(mT)		
											Observer	FATE		
												c. (mT)		
											Vessel	FATE		
												(mT)		
Total weight of bycatch: mT						B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT					if not RWW	FATE		
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released									OBS (mT)		
											VES (mT)			
											FATE	RWW	RWW	RWW
											OBS (mT)			
											VES (mT)			
						Due to gear break bycatch mitigation					ESC	ESC	ESC	
											estimates	OBS (mT)		
											estimates	VES (mT)		

FATE CODES									
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES			
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)			
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)			
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net			
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net			
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		IRN - Roped, pulled from net			
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		OTH - Other, please specify			

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

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OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS															
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded	
$\left(\begin{matrix} \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{matrix} \times \begin{matrix} \text{Type 2 brail} \\ \text{(see PS-4 form)} \end{matrix} \right) = \text{less bycatch (see below)}$		$\left(\begin{matrix} \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{matrix} \times \begin{matrix} \text{Type 2 brail} \\ \text{(see PS-4 form)} \end{matrix} \right) = \text{Total tuna catch}$		$\text{less bycatch (see below)} = \text{Total tuna catch}$		SKIP-JACK YES (%) NO YES (%) NO		YELLOWFIN SMALL (< 75 cm) LARGE (> 75 cm) YES (%) YES (%) YES (%) NUMBER YES (%) YES (%) YES (%) NUMBER				BIGEYE SMALL (< 75 cm) LARGE (> 75 cm) YES (%) YES (%) YES (%) NUMBER YES (%) YES (%) YES (%) NUMBER			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
						Observer	FATE							
							a. (mT)							
						Vessel	FATE							
							(mT)							
						Observer	FATE							
							b. (mT)							
						Vessel	FATE							
							(mT)							
						Observer	FATE							
							c. (mT)							
						Vessel	FATE							
							(mT)							
Total weight of bycatch: mT						B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT								
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released			if not RWW	FATE							
							OBS (mT)							
						Tuna kept onboard for later unload	VES (mT)							
							FATE	RWW	RWW	RWW				
						OBS (mT)								
							VES (mT)							
Due to gear break bycatch mitigation							ESC	ESC	ESC					
						estimates	OBS (mT)							
							VES (mT)							
How many Tags were recovered?		Record species and tag numbers. Fill tag recovery forms!												

FATE CODES									
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES			
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)			
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)			
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net			
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net			
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		IRN - Roped, pulled from net			
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		OTH - Other, please specify			

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

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OBSERVER NAME			VESSEL NAME					PAGE		OF				
										(SET No.)				
OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME						START OF SET DATE AND TIME							
	OBSERVER:		YY	MM	DD	hh	mm	VESSEL LOG:		YY	MM	DD	hh	mm
	(see PS-2)													

		SET SEQUENCE TIMES					
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																																							
brail capacity	sum of all brails	Total catch	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT <i>- circle YES or NO for each species</i>						<i>N.B.: these calculations include all the tuna in this catch, whether retained or discarded</i>																																														
<div style="border: 1px solid black; width: 60px; height: 40px; margin: 0 auto; text-align: center; line-height: 40px;">mT</div> Type 1 brail (see PS-1 form)	<div style="border: 1px solid black; width: 60px; height: 40px; margin: 0 auto; text-align: center; line-height: 40px;"></div> (see PS-4 form)	<div style="border: 1px solid black; width: 120px; height: 40px; margin: 0 auto; text-align: center; line-height: 40px;"></div> less bycatch (see below)	➔									<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" rowspan="2">SKIP-JACK</th> <th colspan="4">YELLOWFIN</th> <th colspan="3">BIGEYE</th> </tr> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> </thead> <tbody> <tr> <td>YES</td><td>(%)</td> <td>YES</td><td>(%)</td> <td>YES</td><td>(%)</td> <td>NUMBER</td> <td>YES</td><td>(%)</td> <td>YES</td><td>(%)</td> <td>NUMBER</td> </tr> <tr> <td>NO</td><td></td> <td>NO</td><td></td> <td>NO</td><td></td> <td></td> <td>NO</td><td></td> <td>NO</td><td></td> <td></td> </tr> </tbody> </table>			SKIP-JACK		YELLOWFIN				BIGEYE			SMALL (< 75 cm)		LARGE (> 75 cm)		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	YES	(%)	NUMBER	YES	(%)	YES	(%)	NUMBER	NO		NO		NO			NO		NO		
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SKJ YFT BET

SPECIES CODE	FATE CODE	OBSERVER		VESSEL LOG		SSI CONDITION		COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)	SKJ	YFI	BEI	
		(mT)	No.	(mT)	No.	CAUGHT / DISCARD							
									Observer	FATE			
										a. (mT)			
									Vessel	FATE			
										(mT)			
									Observer	FATE			
										b. (mT)			
									Vessel	FATE			
										(mT)			
									Observer	FATE			
										c. (mT)			
									Vessel	FATE			
										(mT)			

Total weight of bycatch:

mT

mT

B. OBSERVER totals (mT)
discards + RCC (a+b+c):

$$(a+b+c):$$

Interactions with primary gear (not landed)

COMMENTS / SSI TREATMENT

Interactions with primary gear (not landed)						Comments: gear placement						
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.		CONDITION Captured Released			Tuna kept onboard for later unload if not RWW	FATE				
									OBS (mT)			
									VES (mT)			
									FATE	RWW	RWW	RWW
									OBS (mT)			
									VES (mT)			
								Due to gear break bycatch mitigation		ESC	ESC	ESC
								OBS (mT)				
How many Tags were recovered?						Record species and tag numbers. Fill tag recovery forms!		VES (mT)				

FATE CODES						
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES IEN - Entangled (in gear) IJO - Jumped out (over net) IBR - Broke through net IRN - Roped, pulled from net OTH - Other, please specify
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		
ROR	Retained - other reason (specify)	DSO	Discarded - shark damage	DPD - Discarded Protected Species - Dead		
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																							
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded																									
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \boxed{} \text{ mT}$						<div style="display: flex; justify-content: space-around;"> <div> SKIP-JACK <table border="1"> <tr> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> </tr> </table> </div> <div> YELLOWFIN <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> <div> BIGEYE <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> </div>				YES	(%)	NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO			
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				= Total tuna catch																																			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
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								(mT)						
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT		if not RWW	FATE					
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released				OBS (mT)							
							Tuna kept onboard for later unload	VES (mT)						
								FATE	RWW	RWW	RWW			
								OBS (mT)						
							Due to gear break bycatch mitigation	VES (mT)						
								ESC	ESC	ESC				
How many Tags were recovered?						Record species and tag numbers. Fill tag recovery forms!		estimates	OBS (mT)					
									VES (mT)					

FATE CODES			
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RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ	Discarded - poor quality	(use these fate codes for any SSIs landed on deck)	
DOR	Discarded - other reasons (specify)		
ESC	Escaped		
DPA	Discarded Protected Species - Alive	ICR	Crew released from net
DPD	Discarded Protected Species - Dead	IBR	Broke through net
DPU	Discarded Protected Species - Unknown	IRN	Roped, pulled from net
		OTH	Other, please specify

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

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Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF							
								(SET No.)							
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME						START OF SET DATE AND TIME							
		OBSERVER:		YY	MM	DD	hh	mm	VESSEL LOG:		YY	MM	DD	hh	mm
		(see PS-2)													

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS															
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded	
$\left(\begin{matrix} \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{matrix} \times \begin{matrix} \text{Type 2 brail} \\ \text{(see PS-4 form)} \end{matrix} \right) = \text{less bycatch (see below)} \\ + \\ \left(\begin{matrix} \text{Type 2 brail} \\ \text{(see PS-4 form)} \end{matrix} \times \begin{matrix} \text{Type 2 brail} \\ \text{(see PS-4 form)} \end{matrix} \right) = \text{Total tuna catch}$						SKIP-JACK		YELLOWFIN				BIGEYE			
								SMALL (< 75 cm)		LARGE (> 75 cm)		SMALL (< 75 cm)		LARGE (> 75 cm)	
						YES (%)		YES (%)		YES (%)		YES (%)		YES (%)	
						NO		NO		NO		NO		NO	

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
											Observer	FATE		
												a. (mT)		
											Vessel	FATE		
												(mT)		
											Observer	FATE		
												b. (mT)		
											Vessel	FATE		
												(mT)		
											Observer	FATE		
												c. (mT)		
											Vessel	FATE		
												(mT)		
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT					if not RWW	FATE		
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released									OBS (mT)		
											VES (mT)			
											FATE	RWW	RWW	RWW
											OBS (mT)			
											VES (mT)			
						Due to gear break bycatch mitigation					ESC	ESC	ESC	
											estimates	OBS (mT)		
												VES (mT)		
How many Tags were recovered?						Record species and tag numbers. Fill tag recovery forms!								

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ	Discarded - poor quality	(use these fate codes for any SSIs landed on deck)	
DOR	Discarded - other reasons (specify)		
ESC	Escaped		
DPA	Discarded Protected Species - Alive	ICR - Crew released from net	
DPD	Discarded Protected Species - Dead	IBR - Broke through net	
DPU	Discarded Protected Species - Unknown	IRN - Roped, pulled from net	
		OTH - Other, please specify	

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START OF SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																							
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded																									
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \boxed{} \text{ mT}$						<div style="display: flex; justify-content: space-around;"> <div> SKIP-JACK <table border="1"> <tr> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> </tr> </table> </div> <div> YELLOWFIN <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> <div> BIGEYE <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> </div>				YES	(%)	NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO			
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$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 2 brail} \end{array} \times \begin{array}{c} \boxed{} \end{array} \right) = \boxed{} \text{ mT}$		less bycatch (see below)																																					
				= Total tuna catch																																			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								b. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								c. (mT)						
							Vessel	FATE						
								(mT)						
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT								
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released				if not RWW	FATE						
								OBS (mT)						
							Tuna kept onboard for later unload	VES (mT)						
								FATE	RWW	RWW	RWW			
								OBS (mT)						
								VES (mT)						
						Due to gear break bycatch mitigation		ESC	ESC	ESC				
						estimates	OBS (mT)							
							VES (mT)							
How many Tags were recovered?		Record species and tag numbers. Fill tag recovery forms!												

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ	Discarded - poor quality	(use these fate codes for any SSIs landed on deck)	
DOR	Discarded - other reasons (specify)		
ESC	Escaped		
DPA	Discarded Protected Species - Alive	ICR	Crew released from net
DPD	Discarded Protected Species - Dead	IBR	Broke through net
DPU	Discarded Protected Species - Unknown	IRN	Roped, pulled from net
		OTH	Other, please specify

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile 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 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brails	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.	
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																							
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded																									
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \boxed{} \text{ mT}$						<div style="display: flex; justify-content: space-around;"> <div> SKIP-JACK <table border="1"> <tr> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> </tr> </table> </div> <div> YELLOWFIN <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> <div> BIGEYE <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> </div>				YES	(%)	NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO			
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$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 2 brail} \end{array} \times \begin{array}{c} \boxed{} \end{array} \right) = \boxed{} \text{ mT}$		less bycatch (see below)																																					
		+ = Total tuna catch																																					

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								b. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								c. (mT)						
							Vessel	FATE						
								(mT)						
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT								
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released				if not RWW	FATE						
								OBS (mT)						
							Tuna kept onboard for later unload	VES (mT)						
								FATE	RWW	RWW	RWW			
								OBS (mT)						
								VES (mT)						
						Due to gear break bycatch mitigation		ESC	ESC	ESC				
						estimates	OBS (mT)							
							VES (mT)							
How many Tags were recovered?		Record species and tag numbers. Fill tag recovery forms!												

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ	Discarded - poor quality	(use these fate codes for any SSIs landed on deck)	
DOR	Discarded - other reasons (specify)		
ESC	Escaped		
DPA - Discarded Protected Species - Alive		ICR - Crew released from net	
DPD - Discarded Protected Species - Dead		IBR - Broke through net	
DPU - Discarded Protected Species - Unknown		IRN - Roped, pulled from net	
		OTH - Other, please specify	

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF							
								(SET No.)							
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME						START OF SET DATE AND TIME							
		OBSERVER:		YY	MM	DD	hh	mm	VESSEL LOG:		YY	MM	DD	hh	mm
		(see PS-2)													

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS															
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded	
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \begin{array}{c} \boxed{} \text{ mT} \\ \text{less bycatch (see below)} \end{array}$		$+ \begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 2 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} = \begin{array}{c} \boxed{} \text{ mT} \\ \text{= Total tuna catch} \end{array}$		→		SKIP-JACK		YELLOWFIN				BIGEYE			
								SMALL (< 75 cm)		LARGE (> 75 cm)		SMALL (< 75 cm)		LARGE (> 75 cm)	
						YES (%)		YES (%)		YES (%)		YES (%)		YES (%)	
						NO		NO		NO		NO		NO	

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET	
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)									
											Observer	FATE			
												a. (mT)			
											Vessel	FATE			
												(mT)			
											Observer	FATE			
												b. (mT)			
											Vessel	FATE			
												(mT)			
											Observer	FATE			
												c. (mT)			
											Vessel	FATE			
												(mT)			
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):									
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT					if not RWW	FATE			
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released									OBS (mT)			
											VES (mT)				
											Tuna kept onboard for later unload	FATE	RWW	RWW	RWW
												OBS (mT)			
											VES (mT)				
						Due to gear break bycatch mitigation					ESC	ESC	ESC		
											estimates	OBS (mT)			
												VES (mT)			
How many Tags were recovered?						Record species and tag numbers. Fill tag recovery forms!									

FATE CODES									
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES			
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)			
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)			
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net			
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net			
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		IRN - Roped, pulled from net			
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		OTH - Other, please specify			

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
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	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.	
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS															
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded	
$\left(\begin{matrix} \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{matrix} \times \begin{matrix} \text{Type 2 brail} \\ \text{(see PS-4 form)} \end{matrix} \right) = \text{less bycatch (see below)}$		$\left(\begin{matrix} \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{matrix} \times \begin{matrix} \text{Type 2 brail} \\ \text{(see PS-4 form)} \end{matrix} \right) = \text{Total tuna catch}$		$\text{less bycatch (see below)} = \text{Total tuna catch}$		$\text{less bycatch (see below)} = \text{Total tuna catch}$		$\text{less bycatch (see below)} = \text{Total tuna catch}$		$\text{less bycatch (see below)} = \text{Total tuna catch}$		$\text{less bycatch (see below)} = \text{Total tuna catch}$		$\text{less bycatch (see below)} = \text{Total tuna catch}$	
						SKIP-JACK		YELLOWFIN				BIGEYE			
								SMALL (< 75 cm)		LARGE (> 75 cm)		SMALL (< 75 cm)		LARGE (> 75 cm)	
						YES (%)		YES (%)		YES (%)		YES (%)		YES (%)	
						NO		NO		NO		NO		NO	

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ YFT BET			
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)									
											Observer	FATE			
												a. (mT)			
											Vessel	FATE			
												(mT)			
											Observer	FATE			
												b. (mT)			
											Vessel	FATE			
												(mT)			
											Observer	FATE			
												c. (mT)			
											Vessel	FATE			
												(mT)			
Total weight of bycatch: mT						B. OBSERVER totals (mT) discards + RCC (a+b+c):									
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT									
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released								if not RWW	FATE			
												OBS (mT)			
											VES (mT)				
											Tuna kept onboard for later unload	FATE	RWW	RWW	RWW
												OBS (mT)			
												VES (mT)			
						Due to gear break bycatch mitigation						ESC	ESC	ESC	
											estimates	OBS (mT)			
												VES (mT)			
How many Tags were recovered?						Record species and tag numbers. Fill tag recovery forms!									

FATE CODES									
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES			
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)			
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)			
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net			
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net			
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		IRN - Roped, pulled from net			
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		OTH - Other, please specify			

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.	
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

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	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
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	VESSEL LOG (mT)	Copy the figures recorded by the ship's officers on the Vessel Logsheet, for this set.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ? species and tag numbers	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																							
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded																									
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \boxed{} \text{ mT}$						<div style="display: flex; justify-content: space-around;"> <div> SKIP-JACK <table border="1"> <tr> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> </tr> </table> </div> <div> YELLOWFIN <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> <div> BIGEYE <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> </div>				YES	(%)	NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO			
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				= Total tuna catch																																			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
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Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT					FATE			
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released											
							if not RWW	OBS (mT)						
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								OBS (mT)						
								VES (mT)						
						Due to gear break bycatch mitigation					ESC	ESC	ESC	
							estimates	OBS (mT)						
								VES (mT)						
How many Tags were recovered?		Record species and tag numbers. Fill tag recovery forms!												

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ	Discarded - poor quality	(use these fate codes for any SSIs landed on deck)	
DOR	Discarded - other reasons (specify)		
ESC	Escaped		
DPA	Discarded Protected Species - Alive	ICR	Crew released from net
DPD	Discarded Protected Species - Dead	IBR	Broke through net
DPU	Discarded Protected Species - Unknown	IRN	Roped, pulled from net
		OTH	Other, please specify

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

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	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile 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 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brails	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
ESC		
TAGS	How many tags were recovered ? species and tag numbers	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																																
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded																																		
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \boxed{} \text{ mT}$						<div style="display: flex; align-items: center; justify-content: center;"> → <table border="1"> <tr> <th rowspan="2">SKIP-JACK</th> <th colspan="4">YELLOWFIN</th> <th colspan="4">BIGEYE</th> </tr> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <td>YES (%)</td> <td>YES (%)</td> <td>YES (%)</td> <td>NUMBER</td> <td>YES (%)</td> <td>YES (%)</td> <td>NUMBER</td> <td>YES (%)</td> <td>NUMBER</td> </tr> <tr> <td>NO</td> <td>NO</td> <td>NO</td> <td></td> <td>NO</td> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div>				SKIP-JACK	YELLOWFIN				BIGEYE				SMALL (< 75 cm)		LARGE (> 75 cm)		SMALL (< 75 cm)		LARGE (> 75 cm)		YES (%)	YES (%)	YES (%)	NUMBER	YES (%)	YES (%)	NUMBER	YES (%)	NUMBER	NO	NO	NO		NO	NO		NO					
SKIP-JACK	YELLOWFIN				BIGEYE																																											
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NO	NO	NO		NO	NO		NO																																									
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 2 brail} \end{array} \times \begin{array}{c} \boxed{} \end{array} \right) = \boxed{} \text{ mT}$		less bycatch (see below)																																														
				= Total tuna catch																																												

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								b. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								c. (mT)						
							Vessel	FATE						
								(mT)						
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT				if not RWW	FATE			
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released								OBS (mT)			
										VES (mT)				
										FATE	RWW	RWW	RWW	
										OBS (mT)				
										VES (mT)				
						Due to gear break bycatch mitigation				ESC	ESC	ESC		
										OBS (mT)				
										VES (mT)				
How many Tags were recovered?		Record species and tag numbers. Fill tag recovery forms!								estimates				

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ	Discarded - poor quality	(use these fate codes for any SSIs landed on deck)	
DOR	Discarded - other reasons (specify)		
ESC	Escaped		
DPA	Discarded Protected Species - Alive	ICR	Crew released from net
DPD	Discarded Protected Species - Dead	IBR	Broke through net
DPU	Discarded Protected Species - Unknown	IRN	Roped, pulled from net
		OTH	Other, please specify

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START OF SET DATE and TIME	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.
Observer (PS-2)		The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile 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 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brails. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brails	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ? species and tag numbers	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																							
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded																									
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \boxed{} \text{ mT}$						<div style="display: flex; justify-content: space-around;"> <div> SKIP-JACK <table border="1"> <tr> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> </tr> </table> </div> <div> YELLOWFIN <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> <div> BIGEYE <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> </div>				YES	(%)	NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO			
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				= Total tuna catch																																			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								b. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								c. (mT)						
							Vessel	FATE						
								(mT)						
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT								
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released				if not RWW	FATE						
								OBS (mT)						
							Tuna kept onboard for later unload	VES (mT)						
								FATE	RWW	RWW	RWW			
								OBS (mT)						
								VES (mT)						
						Due to gear break bycatch mitigation		ESC	ESC	ESC				
							estimates	OBS (mT)						
								VES (mT)						
How many Tags were recovered?		Record species and tag numbers. Fill tag recovery forms!												

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ	Discarded - poor quality	(use these fate codes for any SSIs landed on deck)	
DOR	Discarded - other reasons (specify)		
ESC	Escaped		
DPA	Discarded Protected Species - Alive	ICR	Crew released from net
DPD	Discarded Protected Species - Dead	IBR	Broke through net
DPU	Discarded Protected Species - Unknown	IRN	Roped, pulled from net
		OTH	Other, please specify

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																							
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded																									
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \boxed{} \text{ mT}$						<div style="display: flex; justify-content: space-around;"> <div> SKIP-JACK <table border="1"> <tr> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> </tr> </table> </div> <div> YELLOWFIN <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> <div> BIGEYE <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> </div>				YES	(%)	NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO			
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YES	(%)	YES	(%)																																				
NO		NO																																					
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 2 brail} \end{array} \times \begin{array}{c} \boxed{} \end{array} \right) = \boxed{} \text{ mT}$		less bycatch (see below)																																					
				= Total tuna catch																																			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								b. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								c. (mT)						
							Vessel	FATE						
								(mT)						
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT				if not RWW	FATE			
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released								OBS (mT)			
										VES (mT)				
										FATE	RWW	RWW	RWW	
										OBS (mT)				
										VES (mT)				
						Due to gear break bycatch mitigation				ESC	ESC	ESC		
										OBS (mT)				
										VES (mT)				
How many Tags were recovered?		Record species and tag numbers. Fill tag recovery forms!								estimates				

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ Discarded - poor quality		DPA - Discarded Protected Species - Alive	
DOR Discarded - other reasons (specify)		DPD - Discarded Protected Species - Dead	
ESC Escaped		DPU - Discarded Protected Species - Unknown	
(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net	
		IBR - Broke through net	
		IRN - Roped, pulled from net	
		OTH - Other, please specify	

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																							
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded																									
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \boxed{} \text{ mT}$						<div style="display: flex; justify-content: space-around;"> <div> SKIP-JACK <table border="1"> <tr> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> </tr> </table> </div> <div> YELLOWFIN <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> <div> BIGEYE <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> </div>				YES	(%)	NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO			
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				= Total tuna catch																																			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								b. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								c. (mT)						
							Vessel	FATE						
								(mT)						
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT					FATE			
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released											
							if not RWW	OBS (mT)						
								VES (mT)						
							Tuna kept onboard for later unload	FATE	RWW	RWW	RWW			
								OBS (mT)						
								VES (mT)						
						Due to gear break bycatch mitigation					ESC	ESC	ESC	
							estimates	OBS (mT)						
								VES (mT)						
How many Tags were recovered?						Record species and tag numbers. Fill tag recovery forms!								

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ Discarded - poor quality		DPA - Discarded Protected Species - Alive	
DOR Discarded - other reasons (specify)		DPD - Discarded Protected Species - Dead	
ESC Escaped		DPU - Discarded Protected Species - Unknown	
(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net	
		IBR - Broke through net	
		IRN - Roped, pulled from net	
		OTH - Other, please specify	

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	Observer (PS-2)	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.
START of SET DATE and TIME	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ? species and tag numbers	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

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OBSERVER NAME				VESSEL NAME				PAGE OF							
								(SET No.)							
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME						START OF SET DATE AND TIME							
		OBSERVER:		YY	MM	DD	hh	mm	VESSEL LOG:		YY	MM	DD	hh	mm
		(see PS-2)													

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																			
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded					
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \begin{array}{c} \boxed{} \text{ mT} \\ \text{less bycatch (see below)} \end{array}$						→		SKIP-JACK				YELLOWFIN				BIGEYE			
								SMALL (< 75 cm)		LARGE (> 75 cm)		SMALL (< 75 cm)		LARGE (> 75 cm)					
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 2 brail} \end{array} \times \begin{array}{c} \boxed{} \end{array} \right) = \begin{array}{c} \boxed{} \text{ mT} \\ \text{= Total tuna catch} \end{array}$								YES	(%)	YES	(%)	YES	(%)	NUMBER	YES	(%)	YES	(%)	NUMBER
						NO			NO		NO			NO		NO			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								b. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								c. (mT)						
							Vessel	FATE						
								(mT)						
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT								
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released				if not RWW	FATE						
								OBS (mT)						
							Tuna kept onboard for later unload	VES (mT)						
								FATE	RWW	RWW	RWW			
								OBS (mT)						
								VES (mT)						
						Due to gear break bycatch mitigation		ESC	ESC	ESC				
						estimates	OBS (mT)							
							VES (mT)							
How many Tags were recovered?		Record species and tag numbers. Fill tag recovery forms!												

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ	Discarded - poor quality	(use these fate codes for any SSIs landed on deck)	
DOR	Discarded - other reasons (specify)		
ESC	Escaped		
DPA	Discarded Protected Species - Alive	ICR	Crew released from net
DPD	Discarded Protected Species - Dead	IBR	Broke through net
DPU	Discarded Protected Species - Unknown	IRN	Roped, pulled from net
		OTH	Other, please specify

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	Observer (PS-2)	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.
START of SET DATE and TIME	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ? species and tag numbers	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

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OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS															
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded	
$\left(\begin{matrix} \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{matrix} \times \begin{matrix} \text{Type 2 brail} \\ \text{(see PS-4 form)} \end{matrix} \right) = \text{less bycatch (see below)}$		$\left(\begin{matrix} \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{matrix} \times \begin{matrix} \text{Type 2 brail} \\ \text{(see PS-4 form)} \end{matrix} \right) = \text{Total tuna catch}$		$\text{less bycatch (see below)} = \text{Total tuna catch}$		SKIP-JACK YES (%) NO YES (%) NO		YELLOWFIN SMALL (< 75 cm) LARGE (> 75 cm) YES (%) YES (%) YES (%) NUMBER YES (%) YES (%) YES (%) NUMBER				BIGEYE SMALL (< 75 cm) LARGE (> 75 cm) YES (%) YES (%) YES (%) NUMBER YES (%) YES (%) YES (%) NUMBER			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
						Observer	FATE							
							a. (mT)							
						Vessel	FATE							
							(mT)							
						Observer	FATE							
							b. (mT)							
						Vessel	FATE							
							(mT)							
						Observer	FATE							
							c. (mT)							
						Vessel	FATE							
							(mT)							
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT								
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released			if not RWW	FATE							
							OBS (mT)							
						Tuna kept onboard for later unload	VES (mT)							
							FATE	RWW	RWW	RWW				
						OBS (mT)								
							VES (mT)							
						Due to gear break bycatch mitigation		ESC	ESC	ESC				
						estimates	OBS (mT)							
							VES (mT)							
How many Tags were recovered?		Record species and tag numbers. Fill tag recovery forms!												

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ	Discarded - poor quality		
DOR	Discarded - other reasons (specify)		
ESC	Escaped		
(use these fate codes for any SSIs landed on deck)			
DPA	Discarded Protected Species - Alive		
DPD	Discarded Protected Species - Dead		
DPU	Discarded Protected Species - Unknown		
GEAR INTERACTION CODES			
IEN - Entangled (in gear)			
IJO - Jumped out (over net)			
ICR - Crew released from net			
IBR - Broke through net			
IRN - Roped, pulled from net			
OTH - Other, please specify			

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
	OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

FORM PS - 3

REV. 2018

OBSERVER NAME			VESSEL NAME					PAGE		OF					
										(SET No.)					
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME					START OF SET DATE AND TIME								
		OBSERVER:		YY	MM	DD	hh	mm	VESSEL LOG:		YY	MM	DD	hh	mm
		(see PS-2)													

		SET SEQUENCE TIMES					
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS														
brail capacity	sum of all brails	Total catch	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT <i>- circle YES or NO for each species</i>						<i>N.B.: these calculations include all the tuna in this catch, whether retained or discarded</i>					
<div style="border: 1px solid black; width: 60px; height: 40px; margin: 0 auto; text-align: center; line-height: 40px;">mT</div> Type 1 brail (see PS-1 form)	<div style="border: 1px solid black; width: 60px; height: 40px; margin: 0 auto; text-align: center; line-height: 40px;"></div> (see PS-4 form)	<div style="border: 1px solid black; width: 120px; height: 40px; margin: 0 auto; text-align: center; line-height: 40px;"></div> less bycatch (see below)	➔											
<div style="border: 1px solid black; width: 60px; height: 40px; margin: 0 auto; text-align: center; line-height: 40px;"></div> Type 2 brail (see PS-1 form)	<div style="border: 1px solid black; width: 60px; height: 40px; margin: 0 auto; text-align: center; line-height: 40px;"></div> (see PS-4 form)	<div style="border: 1px solid black; width: 120px; height: 40px; margin: 0 auto; text-align: center; line-height: 40px;"></div> = Total tuna catch	SKIP-JACK			YELLOWFIN				BIGEYE				
			SMALL (< 75 cm)		LARGE (> 75 cm)			SMALL (< 75 cm)		LARGE (> 75 cm)				
			YES	(%)	YES	(%)	YES	(%)	NUMBER	YES	(%)	YES	(%)	NUMBER
			NO		NO		NO			NO		NO		

SKJ YFT BET

SPECIES CODE	FATE CODE	OBSERVER (mT) No.		VESSEL LOG (mT) No.		SSI CONDITION CAUGHT / DISCARD		COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)		SKJ	YFI	BEI
									Observer	FATE			
										a. (mT)			
									Vessel	FATE			
										(mT)			
									Observer	FATE			
										b. (mT)			
									Vessel	FATE			
										(mT)			
									Observer	FATE			
										c. (mT)			
									Vessel	FATE			
										(mT)			
									Observer	FATE			
										(mT)			
Total weight of bycatch: mT				mT					B. OBSERVER totals (mT) discards + RCC (a+b+c):				
SPECIES OF SPECIAL INTEREST <i>Interactions with primary gear (not landed)</i>						COMMENTS / SSI TREATMENT			if not RWW	FATE			
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.		CONDITION Captured Released						OBS (mT)			
									VES (mT)				
									Tuna kept onboard for later unload	FATE	RWW	RWW	RWW
										OBS (mT)			
										VES (mT)			
									Due to gear break bycatch mitigation		ESC	ESC	ESC
									estimates	OBS (mT)			
How many Tags were recovered?				Record species and tag numbers. Fill tag recovery forms!						VES (mT)			

FATE CODES						
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES IEN - Entangled (in gear) IJO - Jumped out (over net) IBR - Broke through net IRN - Roped, pulled from net OTH - Other, please specify
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		
ROR	Retained - other reason (specify)	DSO	Discarded - shark damage	DPD - Discarded Protected Species - Dead		
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																							
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded																									
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \boxed{} \text{ mT}$						<div style="display: flex; justify-content: space-around;"> <div> SKIP-JACK <table border="1"> <tr> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> </tr> </table> </div> <div> YELLOWFIN <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> <div> BIGEYE <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> </div>				YES	(%)	NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO			
YES	(%)																																						
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$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 2 brail} \end{array} \times \begin{array}{c} \boxed{} \end{array} \right) = \boxed{} \text{ mT}$		less bycatch (see below)																																					
				= Total tuna catch																																			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								b. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								c. (mT)						
							Vessel	FATE						
								(mT)						
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT					if not RWW	FATE		
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released									OBS (mT)		
											VES (mT)			
											FATE	RWW	RWW	RWW
											OBS (mT)			
											VES (mT)			
						Due to gear break bycatch mitigation					ESC	ESC	ESC	
											OBS (mT)			
											VES (mT)			
How many Tags were recovered?						Record species and tag numbers. Fill tag recovery forms!					estimates			

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ	Discarded - poor quality	(use these fate codes for any SSIs landed on deck)	
DOR	Discarded - other reasons (specify)		
ESC	Escaped		
DPA	Discarded Protected Species - Alive	ICR - Crew released from net	
DPD	Discarded Protected Species - Dead	IBR - Broke through net	
DPU	Discarded Protected Species - Unknown	IRN - Roped, pulled from net	
		OTH - Other, please specify	

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.	
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																							
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded																									
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \boxed{} \text{ mT}$						<div style="display: flex; justify-content: space-around;"> <div> SKIP-JACK <table border="1"> <tr> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> </tr> </table> </div> <div> YELLOWFIN <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> <div> BIGEYE <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> </div>				YES	(%)	NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO			
YES	(%)																																						
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NO		NO																																					
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 2 brail} \end{array} \times \begin{array}{c} \boxed{} \end{array} \right) = \boxed{} \text{ mT}$		less bycatch (see below)																																					
				= Total tuna catch																																			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								b. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								c. (mT)						
							Vessel	FATE						
								(mT)						
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT					FATE			
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released											
							if not RWW	OBS (mT)						
								VES (mT)						
							Tuna kept onboard for later unload	FATE	RWW	RWW	RWW			
								OBS (mT)						
								VES (mT)						
						Due to gear break bycatch mitigation					ESC	ESC	ESC	
							estimates	OBS (mT)						
								VES (mT)						
How many Tags were recovered?		Record species and tag numbers. Fill tag recovery forms!												

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ	Discarded - poor quality	(use these fate codes for any SSIs landed on deck)	
DOR	Discarded - other reasons (specify)		
ESC	Escaped		
DPA	Discarded Protected Species - Alive	ICR	Crew released from net
DPD	Discarded Protected Species - Dead	IBR	Broke through net
DPU	Discarded Protected Species - Unknown	IRN	Roped, pulled from net
		OTH	Other, please specify

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

FORM PS - 3

REV. 2018

OBSERVER NAME			VESSEL NAME					PAGE		OF				
										(SET No.)				
OBSERVER TRIP I.D. NUMBER	START OF SET DATE AND TIME						START OF SET DATE AND TIME							
	OBSERVER:		YY	MM	DD	hh	mm	VESSEL LOG:		YY	MM	DD	hh	mm
	(see PS-2)													

		SET SEQUENCE TIMES					
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS														
brail capacity	sum of all brails	Total catch	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT <i>- circle YES or NO for each species</i>						<i>N.B.: these calculations include all the tuna in this catch, whether retained or discarded</i>					
<div style="border: 1px solid black; width: 60px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">mT</div> x <div style="border: 1px solid black; width: 60px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> </div> = <div style="border: 1px solid black; width: 120px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> </div>	less bycatch (see below)		➔											
(see PS-1 form) (see PS-4 form)	<div style="border: 1px solid black; width: 120px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> </div>													
Type 2 brail (see PS-1 form)	+	= Total tuna catch												
<div style="border: 1px solid black; width: 60px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">mT</div> x <div style="border: 1px solid black; width: 60px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> </div>	<div style="border: 1px solid black; width: 120px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> </div>													

SKIP-JACK		YELLOWFIN					BIGEYE				
		SMALL (< 75 cm)		LARGE (> 75 cm)			SMALL (< 75 cm)		LARGE (> 75 cm)		
YES	(%)	YES	(%)	YES	(%)	NUMBER	YES	(%)	YES	(%)	NUMBER
NO		NO		NO			NO		NO		

SKJ YFT BET

SPECIES CODE	FATE CODE	OBSERVER		VESSEL LOG		SSI CONDITION		COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)	SKJ	YFI	BEI	
		(mT)	No.	(mT)	No.	CAUGHT / DISCARD							
									Observer	FATE			
										a. (mT)			
									Vessel	FATE			
										(mT)			
									Observer	FATE			
										b. (mT)			
									Vessel	FATE			
										(mT)			
									Observer	FATE			
										c. (mT)			
									Vessel	FATE			
										(mT)			

Total weight of bycatch:

mT

mT

B. OBSERVER totals (mT)
discards + RCC (a+b+c):

 $(a+b+c):$

Interactions with primary gear (not landed)

COMMENTS / SSI TREATMENT

Interactions with primary gear (not landed)						Comments: gear placement						
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.		CONDITION Captured Released			Tuna kept onboard for later unload if not RWW	FATE				
									OBS (mT)			
									VES (mT)			
									FATE	RWW	RWW	RWW
									OBS (mT)			
									VES (mT)			
								Due to gear break bycatch mitigation		ESC	ESC	ESC
								OBS (mT)				
How many Tags were recovered?						Record species and tag numbers. Fill tag recovery forms!		VES (mT)				

FATE CODES						
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES IEN - Entangled (in gear) IJO - Jumped out (over net) IBR - Broke through net IRN - Roped, pulled from net OTH - Other, please specify
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		
ROR	Retained - other reason (specify)	DSO	Discarded - shark damage	DPD - Discarded Protected Species - Dead		
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	Observer (PS-2)	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.
START of SET DATE and TIME	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ? species and tag numbers	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																																
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded																																		
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \boxed{} \text{ mT}$						<div style="display: flex; align-items: center; justify-content: center;"> → <table border="1"> <tr> <th rowspan="2">SKIP-JACK</th> <th colspan="4">YELLOWFIN</th> <th colspan="4">BIGEYE</th> </tr> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <td>YES (%)</td> <td>YES (%)</td> <td>YES (%)</td> <td>NUMBER</td> <td>YES (%)</td> <td>YES (%)</td> <td>NUMBER</td> <td>YES (%)</td> <td>NUMBER</td> </tr> <tr> <td>NO</td> <td>NO</td> <td>NO</td> <td></td> <td>NO</td> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div>				SKIP-JACK	YELLOWFIN				BIGEYE				SMALL (< 75 cm)		LARGE (> 75 cm)		SMALL (< 75 cm)		LARGE (> 75 cm)		YES (%)	YES (%)	YES (%)	NUMBER	YES (%)	YES (%)	NUMBER	YES (%)	NUMBER	NO	NO	NO		NO	NO		NO					
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NO	NO	NO		NO	NO		NO																																									
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 2 brail} \end{array} \times \begin{array}{c} \boxed{} \end{array} \right) = \boxed{} \text{ mT}$		less bycatch (see below)																																														
				= Total tuna catch																																												

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								b. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								c. (mT)						
							Vessel	FATE						
								(mT)						
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT				if not RWW	FATE			
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released								OBS (mT)			
										VES (mT)				
										FATE	RWW	RWW	RWW	
										OBS (mT)				
										VES (mT)				
						Due to gear break bycatch mitigation				ESC	ESC	ESC		
										OBS (mT)				
										VES (mT)				
How many Tags were recovered?		Record species and tag numbers. Fill tag recovery forms!								estimates				

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ	Discarded - poor quality	(use these fate codes for any SSIs landed on deck)	
DOR	Discarded - other reasons (specify)		
ESC	Escaped		
DPA	Discarded Protected Species - Alive	ICR	Crew released from net
DPD	Discarded Protected Species - Dead	IBR	Broke through net
DPU	Discarded Protected Species - Unknown	IRN	Roped, pulled from net
		OTH	Other, please specify

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

REV. 2018

OBSERVER NAME				VESSEL NAME				PAGE OF			
								(SET No.)			
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME				START OF SET DATE AND TIME					
		OBSERVER: YY MM DD hh mm				VESSEL LOG: YY MM DD hh mm					
		(see PS-2)									

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																																							
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded																									
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \boxed{} \text{ mT}$						<div style="display: flex; justify-content: space-around;"> <div> SKIP-JACK <table border="1"> <tr> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> </tr> </table> </div> <div> YELLOWFIN <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> <div> BIGEYE <table border="1"> <tr> <th colspan="2">SMALL (< 75 cm)</th> <th colspan="2">LARGE (> 75 cm)</th> </tr> <tr> <th>YES</th> <th>(%)</th> <th>YES</th> <th>(%)</th> </tr> <tr> <td>NO</td> <td></td> <td>NO</td> <td></td> </tr> </table> </div> </div>				YES	(%)	NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO		SMALL (< 75 cm)		LARGE (> 75 cm)		YES	(%)	YES	(%)	NO		NO			
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				= Total tuna catch																																			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								b. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								c. (mT)						
							Vessel	FATE						
								(mT)						
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT				if not RWW	FATE			
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released								OBS (mT)			
										VES (mT)				
										FATE	RWW	RWW	RWW	
										OBS (mT)				
										VES (mT)				
						Due to gear break bycatch mitigation				ESC	ESC	ESC		
										OBS (mT)				
										VES (mT)				
How many Tags were recovered?						Record species and tag numbers. Fill tag recovery forms!				estimates				

FATE CODES			
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage
DPQ	Discarded - poor quality	(use these fate codes for any SSIs landed on deck)	
DOR	Discarded - other reasons (specify)		
ESC	Escaped		
DPA	Discarded Protected Species - Alive	ICR	Crew released from net
DPD	Discarded Protected Species - Dead	IBR	Broke through net
DPU	Discarded Protected Species - Unknown	IRN	Roped, pulled from net
		OTH	Other, please specify

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START OF SET DATE and TIME	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.
Observer (PS-2)		The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard.
	TOTAL TUNA CATCH	Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	YES or NO	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive from net.
	OBSERVER's BREAKDOWN of TOTAL TUNA CAUGHT	YES' or 'NO' must be circled to show if SKJ, small YFT, large YFT, small BET, large BET were even seen in the catch.
	%	Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna.
	Number	If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.	
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ? species and tag numbers	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc. Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

SPC/FFA REGIONAL PURSE SEINE OBSERVER SET DETAILS

FORM PS - 3

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OBSERVER NAME				VESSEL NAME				PAGE OF							
								(SET No.)							
OBSERVER TRIP I.D. NUMBER		START OF SET DATE AND TIME						START OF SET DATE AND TIME							
		OBSERVER:		YY	MM	DD	hh	mm	VESSEL LOG:		YY	MM	DD	hh	mm
		(see PS-2)													

SET SEQUENCE TIMES							
EVENT:	if SSI OBSERVED (Obs Time Sighted)	START OF SET (SKIFF OFF)	BEGIN PURSING	END PURSING	BEGIN BRAILING	END OF BRAILING / SACK ONBOARD	END OF SET (NEXT ACTIVITY STARTS)
TIME:							

SET CATCH DETAILS																			
brail capacity		sum of all brails		Total catch		OBSERVER's BREAKDOWN OF TOTAL TUNA CAUGHT - circle YES or NO for each species								N.B.: these calculations include all the tuna in this catch, whether retained or discarded					
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 1 brail} \\ \text{(see PS-1 form)} \end{array} \times \begin{array}{c} \boxed{} \\ \text{(see PS-4 form)} \end{array} \right) = \begin{array}{c} \boxed{} \text{ mT} \\ \text{less bycatch (see below)} \end{array}$						→		SKIP-JACK				YELLOWFIN				BIGEYE			
								SMALL (< 75 cm)		LARGE (> 75 cm)		SMALL (< 75 cm)		LARGE (> 75 cm)					
$\left(\begin{array}{c} \boxed{} \text{ mT} \\ \text{Type 2 brail} \end{array} \times \begin{array}{c} \boxed{} \end{array} \right) = \begin{array}{c} \boxed{} \text{ mT} \\ \text{= Total tuna catch} \end{array}$								YES	(%)	YES	(%)	YES	(%)	NUMBER	YES	(%)	YES	(%)	NUMBER
						NO			NO		NO			NO		NO			

BY-CATCH (ALL NON-TARGET SPECIES & ALL SSI LANDINGS)										Target Tunas		SKJ	YFT	BET
SPECIES CODE	FATE CODE	OBSERVER (mT) No.	VESSEL LOG (mT) No.	SSI CONDITION CAUGHT / DISCARD	COMMENTS / SSI TREATMENT	A. OBSERVER estimates of total of each species caught (mT)								
							Observer	FATE						
								a. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								b. (mT)						
							Vessel	FATE						
								(mT)						
							Observer	FATE						
								c. (mT)						
							Vessel	FATE						
								(mT)						
Total weight of bycatch:		mT	mT			B. OBSERVER totals (mT) discards + RCC (a+b+c):								
SPECIES OF SPECIAL INTEREST Interactions with primary gear (not landed)						COMMENTS / SSI TREATMENT								
SPECIES CODE	GEAR INTERACTION CODE	OBSERVER (mT) No.	CONDITION Captured Released				if not RWW	FATE						
								OBS (mT)						
							Tuna kept onboard for later unload	VES (mT)						
								FATE	RWW	RWW	RWW			
								OBS (mT)						
								VES (mT)						
						Due to gear break bycatch mitigation		ESC	ESC	ESC				
						estimates	OBS (mT)							
							VES (mT)							
How many Tags were recovered?		Record species and tag numbers. Fill tag recovery forms!												

FATE CODES									
RWW	Retained - whole weight	DFR	Discarded trunk - fins retained (shark only)	DPQ	Discarded - poor quality	GEAR INTERACTION CODES			
RHG	Retained - headed and gutted (billfish only)	DTS	Discarded - too small (tuna only)	DOR	Discarded - other reasons (specify)	IEN - Entangled (in gear)			
RGG	Retained - gilled and gutted (kept for sale)	DGD	Discarded - gear damage (tuna only)	ESC	Escaped	IJO - Jumped out (over net)			
RPT	Retained - partial (e.g. fillet, loin)	DVF	Discarded - vessel fully loaded	(use these fate codes for any SSIs landed on deck)		ICR - Crew released from net			
RCC	Retained - crew consumption (onboard)	DUS	Discarded - unwanted species	DPA - Discarded Protected Species - Alive		IBR - Broke through net			
ROR	Retained - other reason (specify)	DSD	Discarded - shark damage	DPD - Discarded Protected Species - Dead		IRN - Roped, pulled from net			
RFR	Retained trunk - fins retained (shark only)	DWD	Discarded - whale damage	DPU - Discarded Protected Species - Unknown		OTH - Other, please specify			

(A PS-3 form **must** be filled out for the first and every set (recorded as *activity code 1* on PS-2) - whether monitored or not, even if a skunk set.) (For the very rare occasion that a set is not monitored the column for the vessel's estimate of catch must still be completed.) (N.B.: A PS-4 form is not required for skunk set.)

OBSERVER NAME		Print first name first and last name last. E.g.: "John Smith" not "Smith John". Print clearly !
VESSEL NAME		Full unabbreviated name. E.g.: a boat with name "Captain Paul Catchit" should not be abbreviated to Capt. P.Catchit.
PAGE OF	START of SET	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.
DATE and	Observer (PS-2)	The exact date and time that the observer recorded for this set on the PS-2. Record as year/month/day.
TIME	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.
If SSI Observed (Obs Time Sighted)		Mark the time the observer first noticed the species of special interest. Only required for SSIs that eventually end up inside the net or were landed (i.e not required for sighted SSIs).
SET SEQUENCE	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.
	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. Record the time the winch is switched on.
	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.
	BEGIN BRAILING	Record the time the vessel starts the brailing process. This will have been recorded on the PS-4 form. If there was no brailing just record a dash.
	END BRAILING / SACK ONBOARD	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 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.
SET CATCH / CAPTURE DETAILS	TOTAL CATCH and TOTAL TUNA CATCH	
	Braile Capacity	Find on the PS-1. Use to calculate total catch. 'Braile capacity' x 'Sum of all brailes' = 'TOTAL CATCH'
	Sum of all brailes	After calculating the total number of brailes on the PS-4 form (for the same set) transfer your answer here.
	Type 1 and	... if a 2nd braile type is also used for this set samples, estimates of the braile capacity for both braile types must be made. Fill the 'braile capacity' and the 'sum of all braile' fields for both the 'type 1' and the 'type 2' brailes. Add calculations of total catch from each braile type together to get a single "TOTAL CATCH" figure.
	Type 2 brailes	(If there is no 'type 2' braile (which is normal) then simply record a dash in each of the 'type 2' fields and all other calculations will be based only on the 'type 1' braile information that is provided.)
	TOTAL CATCH less bycatch	This is the combined weight of all the (target and bycatch species) fish brought onboard. Calculate the amount of bycatch (in mT) that is in the catch in the bycatch area below and transfer to this field.
	TOTAL TUNA CATCH	Subtract the total amount of bycatch from the TOTAL CATCH to get TOTAL TUNA CATCH. This includes all tuna caught whether or not it is later discarded. It does not include tuna that escaped alive 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 BREAKDOWN of TOTAL TUNA CAUGHT	% Carefully eye-estimate the percentage of the TOTAL TUNA for each species (+ each size category for YFT and BET) N.B.: % of small (or large) YFT (or BET) is the % of TOTAL TUNA ! NOT % of that species of tuna. Number If there are not many large YFT or BET and good estimate of number can be made record number of large YFT (or BET) If a good estimate (counts) is not easy, dash the 'number' field. Do not make a rough estimate !
	BY-CATCH SPECIES CODE	Record every species that lands on deck with the three letter FAO species code.
	FOR SPECIES OF SPECIAL INTEREST	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 of the SSI when landed and when discarded/ released. Note SSIs cannot be kept onboard (injured turtle may be while recovering). Use a second line if different condition codes for same species (i.e. Landed: 10 FAL A1, 5 FAL A3). <u>These landed SSIs are no longer recorded on Gen-2 form.</u> Describe interaction / Treatment / Release in comments, journal, report. Use new PS 4 sample type - 'other' to record length and sex of landed SSIs.
	1. (under 'Bycatch - all non-target species & all SSI landings)	Record any SSIs you see inside or touching the primary gear (net), but are not subsequently landed onto the deck in this area.
	2. (under 'SSI Interactions with primary gear- not landed)	Use the new gear interaction codes instead of the normal fate codes in this area. Record their condition (A0- alive, A1- alive 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. Eg: RRU RWW 2 mT REMEMBER - use only one (the best and most informative) code for each line. RRU DTS 0.5 mT
	OBSERVER (mT)	Calculate the amount of each species caught, in each fate code category, using an appropriate assessment technique. 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.
	Number	Place a dash in the column if they have not recorded the species.
	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 caught	Calculate the combined large and small % 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.
OBS (mT)	Give a careful approximation (eye-estimate) of the total amount of catch for the relevant fate /species code combination. Record the amounts in metric tonnes.	
VES (mT)	Copy the weight, as recorded for each species in the vessel's logsheet. 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) discards + RCC	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 and the retained for crew consumption (RCC) combined for that species.	
Tuna kept onboard for later unload	Usually tuna are retained whole weight (RWW). If so then RWW can be calculated as (A. - B.) for each species. 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 mitigation	Best observer estimate of mT of any live tuna that escaped during set. Refer to Captain for any tuna seen escaping via sonar. Include any live tuna escaped from gear breakage or because vessel tries to release important bycatch. N.B. This does not include dead tuna that are released from the net after a breakdown during or after net sac-up = discards.	
TAGS	How many tags were recovered ?	Note the number of tags found during this set. Look out for tags on tuna, billfish, sharks, turtles, birds, etc.
	species and tag numbers	Record tag number and species . Note tag colour, tagging organisation and any unusual features about condition. Fill these and other tag details into the tag recovery form.

FORM PS - 5

VESSEL NAME	OBSERVER NAME	OBSERVER TRIP ID	PAGE	OF

[illegible]

WELL ACTIVITY CODES		SOURCE	DESTINATION	VESSEL CHANGE ?
FS	Received as desired catch from a set on this vessel	"NET"	<well no.>	+
CR	Retained from a set solely because of catch-retention rules	"NET"	<well no.>	+
WT	Transferred between wells	<well no.>	<well no.>	0
UL	Unloaded to cannery or cool store	<well no.>	"SHORE"	-
TR	Received into well from another vessel's hold	<vessel name>	<well no.>	+
TG	Given from well to another vessel's hold	<well no.>	<vessel name>	-
SR	Received into well from another vessels net	<vessel name>	<well no.>	+
DC	Discarded into the sea from Well due to spoilage, etc.	<well no.>	"DISC."	-
CR <well no.>s		Record ALL CATCH in metric tonnes. Use whole numbers (e.g.: 25).		
		Calculate the "NEW CUMULATIVE TOTAL" by adding or subtracting (see the "VESSEL CHANGE ?" value for '+' or '-') to or from the previous "cumulative total" (on the previous line). This is tonnage that has been 'added to' or 'removed from' the vessel.		

SPC/FFA REGIONAL PURSE SEINE OBSERVER WELL TRANSFER RECONCILIATION FORM

FORM PS - 5

REV. 2018

VESSEL NAME

OBSERVER NAME

OBSERVER TRIP ID

PAGE OF

DATE	TIME	WELL ACTIVITY (CODE)	SOURCE	DESTINATION	METRIC TONNES MOVED	VESSEL CHANGE ? (+ / - / 0)	NEW CUMULATIVE TOTAL	RECORDED ON LOGSHEET? Y/N	COMMENT

Date:	Record the date that the fish was transferred on. Use ship's time.
Time:	Record the time the fish were transferred. Use ship's time. Note each transfer (in or out of a well) should be recorded with at least one line of data.
Well activity code:	Use Well Activity codes at bottom of this page to show types of fish transfer that took place. The well activity codes explain where the fish came from and where they were transferred to. This might include fish that were not loaded into your vessel's well, but were transferred directly from the brailer to another boat.
Source:	The source indicates where the fish has come from. The source code is related to the well activity code that you have recorded. An explanation of the source information that should be recorded is outlined to the right of the well activity code you have used. NET: The fish has come from the net. Record 'NET'. 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.
Destination:	The destination indicates where the fish were transferred to. The destination is also related to the well activity code that has been recorded. The type of destination information required is outlined on the bottom of this form - on the same line and to the right of the related 'well activity code'
Vessel Change?	Use the symbol provided to indicate if they were more or less fish on your vessel after the fish transfer. See further explanations below. You do not have to state the amount. (+) indicates a positive change - there are more fish on your vessel after the fish transfer. (--) indicates a negative change - there are less fish on your vessel after the fish transfer.
New Cumulative Total	Record the vessel's new 'onboard' total or 'cumulative' total here. The figure should be consistent with the amounts you have recorded to date.
Recorded on logsheet? Y/N	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.

Examples

10/10/11	11.25	FS	NET	P5	30	+	30	Y	From set, on logsheet
11/10/11	15.20	FS	NET	P1	35	+	65	Y	See PS-3 form
11/10/11	15.20	FS	NET	P2	30	+	95	Y	See PS-3 form
11/10/11	15.20	FS	NET	S3	15	+	110	Y	See PS-3 form
15/10/11	22.20	WT	P1	S1	30	0	110	N	Not observed, see jnl page 52
16/10/11	08.10	TR	Yasu [#] 2	S7	40	+	150	N	See journal page 58
18/10/11	15.45	TG	S1	Ying [#] 9	30	-	120	N	See journal page 62
19/10/11	11.25	FS	NET	P7	35	+	155	N	From set, not on logsheet
20/10/11	18.05	SR	Yasu [#] 8	P2	20	+	175	N	

WELL ACTIVITY CODES	SOURCE	DESTINATION	VESSEL CHANGE ?
FS Received from a set on this vessel	"NET"	<well no.>	+
CR Retained from a set solely because of catch-retention rules	"NET"	<well no.>	+
WT Transferred between wells	<well no.>	<well no.>	0
UL Unloaded to cannery or cool store	<well no.>	"SHORE"	-
TR Received into well from another vessel	<vessel name>	<well no.>	+
TG Given from well to another vessel's hold	<well no.>	<vessel name>	-
SR Received into well from another vessels net	<vessel name>	<well no.>	+
DC Discarded into the sea from Well due to spoilage, etc.	<well no.>	"DISC."	-
CR <well no.>s	CR <well no.>s are wells used by a vessel to collect fish that would have been discarded if there was no WCPFC catch retention CMM. These <well no.>s will be the DESTINATION <well no.>s when WELL ACTIVITY CODE = CR is used. They may also be used with WELL ACTIVITY CODE = WT, if small fish are sorted from other (mixed sized fish) wells and into these wells. CR <well no.>s may also be used it as SOURCE <well no.>s if fish are being removed from these wells during other Well Activities.		

FORM PS - 5

VESSEL NAME	OBSERVER NAME	OBSERVER TRIP ID	PAGE	OF

[illegible]

WELL ACTIVITY CODES				SOURCE	DESTINATION	VESSEL CHANGE ?
FS	Received as desired catch from a set on this vessel			"NET"	<well no.>	+
CR	Retained from a set solely because of catch-retention rules			"NET"	<well no.>	+
WT	Transferred between wells			<well no.>	<well no.>	0
UL	Unloaded to cannery or cool store			<well no.>	"SHORE"	-
TR	Received into well from another vessel's hold			<vessel name>	<well no.>	+
TG	Given from well to another vessel's hold			<well no.>	<vessel name>	-
SR	Received into well from another vessels net			<vessel name>	<well no.>	+
DC	Discarded into the sea from Well due to spoilage, etc.			<well no.>	"DISC."	-
CR <well no.>s				Record ALL CATCH in metric tonnes. Use whole numbers (e.g.: 25).		
				Calculate the "NEW CUMULATIVE TOTAL" by adding or subtracting (see the "VESSEL CHANGE ?" value for '+' or '-') to or from the previous "cumulative total" (on the previous line). This is tonnage that has been 'added to' or 'removed from' the vessel.		

SPC/FFA REGIONAL PURSE SEINE OBSERVER WELL TRANSFER RECONCILIATION FORM

FORM PS - 5

REV. 2018

VESSEL NAME

OBSERVER NAME

OBSERVER TRIP ID

PAGE OF

DATE	TIME	WELL ACTIVITY (CODE)	SOURCE	DESTINATION	METRIC TONNES MOVED	VESSEL CHANGE ? (+ / - / 0)	NEW CUMULATIVE TOTAL	RECORDED ON LOGSHEET? Y/N	COMMENT

Date:	Record the date that the fish was transferred on. Use ship's time.
Time:	Record the time the fish were transferred. Use ship's time. Note each transfer (in or out of a well) should be recorded with at least one line of data.
Well activity code:	Use Well Activity codes at bottom of this page to show types of fish transfer that took place. The well activity codes explain where the fish came from and where they were transferred to. This might include fish that were not loaded into your vessel's well, but were transferred directly from the brailer to another boat.
Source:	The source indicates where the fish has come from. The source code is related to the well activity code that you have recorded. An explanation of the source information that should be recorded is outlined to the right of the well activity code you have used. NET: The fish has come from the net. Record 'NET'. 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.
Destination:	The destination indicates where the fish were transferred to. The destination is also related to the well activity code that has been recorded. The type of destination information required is outlined on the bottom of this form - on the same line and to the right of the related 'well activity code'
Vessel Change?	Use the symbol provided to indicate if they were more or less fish on your vessel after the fish transfer. See further explanations below. You do not have to state the amount. (+) indicates a positive change - there are more fish on your vessel after the fish transfer. (--) indicates a negative change - there are less fish on your vessel after the fish transfer.
New Cumulative Total	Record the vessel's new 'onboard' total or 'cumulative' total here. The figure should be consistent with the amounts you have recorded to date.
Recorded on logsheet? Y/N	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.

Examples

10/10/11	11.25	FS	NET	P5	30	+	30	Y	From set, on logsheet
11/10/11	15.20	FS	NET	P1	35	+	65	Y	See PS-3 form
11/10/11	15.20	FS	NET	P2	30	+	95	Y	See PS-3 form
11/10/11	15.20	FS	NET	S3	15	+	110	Y	See PS-3 form
15/10/11	22.20	WT	P1	S1	30	0	110	N	Not observed, see jnl page 52
16/10/11	08.10	TR	Yasu# 2	S7	40	+	150	N	See journal page 58
18/10/11	15.45	TG	S1	Ying#9	30	-	120	N	See journal page 62
19/10/11	11.25	FS	NET	P7	35	+	155	N	From set, not on logsheet
20/10/11	18.05	SR	Yasu# 8	P2	20	+	175	N	

WELL ACTIVITY CODES	SOURCE	DESTINATION	VESSEL CHANGE ?
FS Received from a set on this vessel	"NET"	<well no.>	+
CR Retained from a set solely because of catch-retention rules	"NET"	<well no.>	+
WT Transferred between wells	<well no.>	<well no.>	0
UL Unloaded to cannery or cool store	<well no.>	"SHORE"	-
TR Received into well from another vessel	<vessel name>	<well no.>	+
TG Given from well to another vessel's hold	<well no.>	<vessel name>	-
SR Received into well from another vessels net	<vessel name>	<well no.>	+
DC Discarded into the sea from Well due to spoilage, etc.	<well no.>	"DISC."	-
CR <well no.>s	CR <well no.>s are wells used by a vessel to collect fish that would have been discarded if there was no WCPFC catch retention CMM. These <well no.>s will be the DESTINATION <well no.>s when WELL ACTIVITY CODE = CR is used. They may also be used with WELL ACTIVITY CODE = WT, if small fish are sorted from other (mixed sized fish) wells and into these wells. CR <well no.>s may also be used it as SOURCE <well no.>s if fish are being removed from these wells during other Well Activities.		

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
- 2 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 auxiliary 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
TTX	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

RMV	Mobula spp.
RMB	Giant Manta

DLP	All Dolphins
DBO	Bottlenose Dolphin
DCO	Common Dolphin (short-beaked)
DRR	Risso's Dolphin
DSI	Spinner Dolphin
DPN	Spotted Dolphin
DST	Striped Dolphin
RTD	Rough-toothed Dolphin

BIZ	All birds
DKN	Black-footed albatross
DIZ	Laysan albatross
ALZ	Albatrosses
SZV	Boobies and Gannets
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 specify

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

REV. 2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF
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VESEL OR AIRCRAFT SIGHTINGS

	SHIP'S TIME		OBSERVER'S VESSEL POSITION				SIGHTED VESSEL OR AIRCRAFT				COMPASS BEARING	DISTANCE	ACTION CODE	PHOTO	COMMENTS
	DATE	TIME	LATITUDE	N	LONGITUDE	E	NAME	INTERNATIONAL	FLAG	TYPE	BEARING	(Nautical	CODE	FRAME #	
	(MMDD)	(hh mm)	(dd° mm.mmm')	S	(ddd° mm.mmm')	W		CALLSIGN		CODE	(degrees)	Miles)	(seen vess)		
1															
2															
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FISH TRANSFERRING, FISH DUMPING, BUNKERING by OBSERVER'S VESSEL

	SHIP'S TIME		OBSERVER'S VESSEL POSITION				OTHER VESSEL				FISH TRANSFERRED (circle units)				ACTION CODE	COMMENTS
	DATE	TIME	LATITUDE	N	LONGITUDE	E	NAME	INTERNATIONAL	FLAG	TYPE	SKJ	YFT	BET			
	(MMDD)	(hh mm)	(dd° mm.mmm')	S	(ddd° mm.mmm')	W		CALLSIGN		CODE	WGT. NO.	WGT. NO.	WGT. NO.	WGT. NO.	(host vess)	
1																
2																
3																

VESEL AND AIRCRAFT TYPE CODES 1 SINGLE PURSE SEINE 2 LONGLINE 3 POLE AND LINE 4 MOTHERSHIP 5 TROLL 6 NET BOAT 7 BUNKER 8 SEARCH, ANCHOR OR LIGHT BOAT 9 FISH CARRIER 10 TRAWLER 21 LIGHT AIRCRAFT 22 HELICOPTER 31 OTHER - please specify:	FLAG COUNTRY CODES • IF COUNTRY IS NOT IN LIST WRITE NAME OF COUNTRY CN CHINA US USA BZ BELIZE JP JAPAN PH PHILLIPINES RU RUSSIA TW TAIWAN PA PANAMA SG SINGAPORE KR KOREA HN HONDURAS LK SRI LANKA VU VANUATU	ACTION CODES • FISHING INCLUDES ANY FISHING RELATED ACTIVITY NOT OTHERWISE COVERED HERE RECEIVING FI FISHING TR TRANSHIPPING FISH PF POSSIBLY FISHING SR SET SHARING NF NOT FISHING BR BUNKERING DF DUMPING FISH OR OTHER ...specify... GIVING TG TRANSHIPPING FISH (from hold in one boat to hold in other) SG SET SHARING..... (from one boat's net to another boat's hold) BG BUNKERING OG OTHER	ALL WEIGHTS MUST BE METRIC TONNES
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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'	Take positions from the GPS.
Longitude ddd°mm.mmm'	Record in degrees (2 digits for latitude and 3 for longitude), minutes and to 3 decimal place fractions of minutes
N S & E W	It is very important to record if latitude is North or South of the equator by writing "N" or "S" beside the position. 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 type codes " 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 operation with the observer's vessel.
International callsign		The call-sign that should be visibly painted on the other vessel
Type Code		Use the "Vessel and aircraft type codes " on front of this form to describe what type of vessel is receiving the fish.
FISH TRANSFERRED	SkipJack Weight	Total Weight of Skipjack that has been transferred
	Yellowfin weight	Total Weight of Yellowfin that has been transferred
	Bigeye Weight	Total Weight of Bigeye that has been 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.
	Comments	Comment about the transfer activities that take place (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. 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. <i>Host vessel = vessel that observer is on.</i> <i>Use the "?R" codes if host vessel is receiving fish or items from another vessel.</i> <i>Use the "?G" codes if the host vessel is giving fish or items to another vessel</i> 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.

REV. 2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF
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VESEL OR AIRCRAFT SIGHTINGS

	SHIP'S TIME		OBSERVER'S VESSEL POSITION				SIGHTED VESSEL OR AIRCRAFT				COMPASS BEARING	DISTANCE	ACTION CODE	PHOTO	COMMENTS
	DATE	TIME	LATITUDE	N	LONGITUDE	E	NAME	INTERNATIONAL	FLAG	TYPE	BEARING	(Nautical	CODE	FRAME #	
	(MMDD)	(hh mm)	(dd° mm.mmm')	S	(ddd° mm.mmm')	W		CALLSIGN		CODE	(degrees)	Miles)	(seen vess)		
1															
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FISH TRANSFERRING, FISH DUMPING, BUNKERING by OBSERVER'S VESSEL

	SHIP'S TIME		OBSERVER'S VESSEL POSITION				OTHER VESSEL				FISH TRANSFERRED (circle units)				ACTION CODE	COMMENTS
	DATE	TIME	LATITUDE	N	LONGITUDE	E	NAME	INTERNATIONAL	FLAG	TYPE	SKJ	YFT	BET			
	(MMDD)	(hh mm)	(dd° mm.mmm')	S	(ddd° mm.mmm')	W		CALLSIGN		CODE	WGT. NO.	WGT. NO.	WGT. NO.	WGT. NO.	(host vess)	
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2																
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FISH TRANSFERRING, FISH DUMPING, BUNKERING by OBSERVER'S VESSEL

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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.

Supplementary FORM GEN - 1

OBSERVER NAME

VESSEL NAME

OBSERVER TRIP ID NUMBER

PAGE 1 OF 1

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

[illegible]

FISH TRANSFERRING, FISH DUMPING, BUNKERING by OBSERVER'S VESSEL									
1	2	3	4	5	6	7	8	9	10
DATE	TIME	VESSEL NAME	VESSEL TYPE	VESSEL NO.	VESSEL FLAG	VESSEL HOME PORT	VESSEL HOME COUNTRY	VESSEL HOME STATE	VESSEL HOME CITY
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

[illegible]

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

FORM GEN - 2

Rev. 2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF
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SSI CODE	START OF INTERACTION TIME (HH : mm)		END OF INTERACTION TIME (HH : mm)		DATE	LATITUDE		LONGITUDE	
					YY MM DD	(dd mm.mmm)	N S	(ddd mm.mmm)	E W
VESSEL INTERACTION CODE	Est. DISTANCE from V.		CONDITION CODE		Estimate of SSI Length		Total Numbers		
	START m NM	END m NM	START	END	Adults m cm	Juveniles m cm	Adults	Juveniles	

Description of Species / Interaction

SSI CODE	START OF INTERACTION TIME (HH : mm)		END OF INTERACTION TIME (HH : mm)		DATE	LATITUDE		LONGITUDE	
					YY MM DD	(dd mm.mmm)	N S	(ddd mm.mmm)	E W
VESSEL INTERACTION CODE	Est. DISTANCE from V.		CONDITION CODE		Estimate of SSI Length		Total Numbers		
	START m NM	END m NM	START	END	Adults m cm	Juveniles m cm	Adults	Juveniles	

Description of Species / Interaction

SSI CODE	START OF INTERACTION TIME (HH : mm)		END OF INTERACTION TIME (HH : mm)		DATE	LATITUDE		LONGITUDE	
					YY MM DD	(dd mm.mmm)	N S	(ddd mm.mmm)	E W
VESSEL INTERACTION CODE	Est. DISTANCE from V.		CONDITION CODE		Estimate of SSI Length		Total Numbers		
	START m NM	END m NM	START	END	Adults m cm	Juveniles m cm	Adults	Juveniles	

Description of Species / Interaction

SSI CODE	START OF INTERACTION TIME (HH : mm)		END OF INTERACTION TIME (HH : mm)		DATE	LATITUDE		LONGITUDE	
					YY MM DD	(dd mm.mmm)	N S	(ddd mm.mmm)	E W
VESSEL INTERACTION CODE	Est. DISTANCE from V.		CONDITION CODE		Estimate of SSI Length		Total Numbers		
	START m NM	END m NM	START	END	Adults m cm	Juveniles m cm	Adults	Juveniles	

Description of Species / Interaction

SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS Instructions

Rev. 2018

The Purpose of the new Vessel Interaction Form is to capture any interactions by any Species of Special Interest with the vessel or its non-primary gear. 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 start of the interaction (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	ICV - Collision with vessel
ION - Interaction, outside net	ICP - Collision with propeller
ICF - Interaction, crew feeding	ICT= Collision with Tori line
IWF - Interaction - with FADs, but not set on	FRB- Feeding on bait during set
IDW - Interaction - dead in water	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 first noticed the interaction. 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 juvenile 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 juvenile 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

Rev. 2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF
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SSI CODE	START OF INTERACTION TIME (HH : mm)		END OF INTERACTION TIME (HH : mm)		DATE	LATITUDE		LONGITUDE	
					YY MM DD	(dd mm.mmm)	N S	(ddd mm.mmm)	E W
VESSEL INTERACTION CODE	Est. DISTANCE from V.		CONDITION CODE		Estimate of SSI Length		Total Numbers		
	START m NM	END m NM	START	END	Adults m cm	Juveniles m cm	Adults	Juveniles	

Description of Species / Interaction

SSI CODE	START OF INTERACTION TIME (HH : mm)		END OF INTERACTION TIME (HH : mm)		DATE	LATITUDE		LONGITUDE	
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Description of Species / Interaction

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Description of Species / Interaction

SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS Instructions

Rev. 2018

The Purpose of the new Vessel Interaction Form is to capture any interactions by any Species of Special Interest with the vessel or its non-primary gear. 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.

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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 start of the interaction (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	ICV - Collision with vessel
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**SPC / FFA REGIONAL OBSERVER
SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS**

FORM GEN - 2

Rev. 2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID NUMBER	PAGE OF
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SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS Instructions

Rev. 2018

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

FORM GEN - 2

Rev. 2018

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SPECIES OF SPECIAL INTEREST - VESSEL INTERACTIONS Instructions

Rev. 2018

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**SPC / FFA REGIONAL OBSERVER
SPECIES OF SPECIAL INTEREST - SIGHTINGS**

**Supplement to
FORM GEN - 2**

Rev 2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID No.	PAGE OF
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DATE YY MM DD	LATITUDE		LONGITUDE		SIGHTING CODE	TALLY	TOTAL NUMBER
	(dd mm.mmm)	N S	(ddd mm.mmm)	E W			
SSI CODE	Species Description						

DATE YY MM DD	LATITUDE		LONGITUDE		SIGHTING CODE	TALLY	TOTAL NUMBER
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SPECIES OF SPECIAL INTEREST - Supplementary (SIGHTINGS) Instructions

Rev. 2018

The purpose of the newly formatted *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 migratory 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 migratory 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

TALLY: 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.

**SPC / FFA REGIONAL OBSERVER
SPECIES OF SPECIAL INTEREST - SIGHTINGS**

**Supplement to
FORM GEN - 2**

Rev 2018

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**SPC / FFA REGIONAL OBSERVER
SPECIES OF SPECIAL INTEREST - SIGHTINGS**

**Supplement to
FORM GEN - 2**

Rev 2018

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	(dd mm.mmm)	N S	(ddd mm.mmm)	E W			
SSI CODE	Species Description						

DATE YY MM DD	LATITUDE		LONGITUDE		SIGHTING CODE	TALLY	TOTAL NUMBER
	(dd mm.mmm)	N S	(ddd mm.mmm)	E W			
SSI CODE	Species Description						

DATE YY MM DD	LATITUDE		LONGITUDE		SIGHTING CODE	TALLY	TOTAL NUMBER
	(dd mm.mmm)	N S	(ddd mm.mmm)	E W			
SSI CODE	Species Description						

DATE YY MM DD	LATITUDE		LONGITUDE		SIGHTING CODE	TALLY	TOTAL NUMBER
	(dd mm.mmm)	N S	(ddd mm.mmm)	E W			
SSI CODE	Species Description						

DATE YY MM DD	LATITUDE		LONGITUDE		SIGHTING CODE	TALLY	TOTAL NUMBER
	(dd mm.mmm)	N S	(ddd mm.mmm)	E W			
SSI CODE	Species Description						

DATE YY MM DD	LATITUDE		LONGITUDE		SIGHTING CODE	TALLY	TOTAL NUMBER
	(dd mm.mmm)	N S	(ddd mm.mmm)	E W			
SSI CODE	Species Description						

DATE YY MM DD	LATITUDE		LONGITUDE		SIGHTING CODE	TALLY	TOTAL NUMBER
	(dd mm.mmm)	N S	(ddd mm.mmm)	E W			
SSI CODE	Species Description						

SPECIES OF SPECIAL INTEREST - Supplementary (SIGHTINGS) Instructions

Rev. 2018

The purpose of the newly formatted *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 migratory 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 migratory 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

TALLY: 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.

**SPC / FFA REGIONAL OBSERVER
SPECIES OF SPECIAL INTEREST - SIGHTINGS**

**Supplement to
FORM GEN - 2**

Rev 2018

OBSERVER NAME	VESSEL NAME	OBSERVER TRIP ID No.	PAGE OF
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DATE YY MM DD	LATITUDE		LONGITUDE		SIGHTING CODE	TALLY	TOTAL NUMBER
	(dd mm.mmm)	N S	(ddd mm.mmm)	E W			
SSI CODE	Species Description						

DATE YY MM DD	LATITUDE		LONGITUDE		SIGHTING CODE	TALLY	TOTAL NUMBER
	(dd mm.mmm)	N S	(ddd mm.mmm)	E W			
SSI CODE	Species Description						

DATE YY MM DD	LATITUDE		LONGITUDE		SIGHTING CODE	TALLY	TOTAL NUMBER
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SSI CODE	Species Description						

DATE YY MM DD	LATITUDE		LONGITUDE		SIGHTING CODE	TALLY	TOTAL NUMBER
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SSI CODE	Species Description						

DATE YY MM DD	LATITUDE		LONGITUDE		SIGHTING CODE	TALLY	TOTAL NUMBER
	(dd mm.mmm)	N S	(ddd mm.mmm)	E W			
SSI CODE	Species Description						

DATE YY MM DD	LATITUDE		LONGITUDE		SIGHTING CODE	TALLY	TOTAL NUMBER
	(dd mm.mmm)	N S	(ddd mm.mmm)	E W			
SSI CODE	Species Description						

DATE YY MM DD	LATITUDE		LONGITUDE		SIGHTING CODE	TALLY	TOTAL NUMBER
	(dd mm.mmm)	N S	(ddd mm.mmm)	E W			
SSI CODE	Species Description						

SPECIES OF SPECIAL INTEREST - Supplementary (SIGHTINGS) Instructions

Rev. 2018

The purpose of the newly formatted *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 migratory 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 migratory routes.

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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

TALLY: 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.

OBSERVER PROGRAMME:	SPC/FFA REGIONAL OBSERVER VESSEL TRIP MONITORING SUMMARY		FORM GEN - 3 (pg 1)	
REV. 2018		TRIP START DATE YY MM DD		
Observer NAME		<i>This form <u>must</u> be filled in by the observer for every trip</i>		
Obs. NATIONALITY	TRIP ID NUMBER	COASTAL STATE LICENCES (IF ANY)		NATIONALITY OF BOARDING VESSEL IF BOARDED DURING TRIP AT SEA
VESSEL NAME	COUNTRY REG. #	UVI	IRCS	VESSEL FLAG VESSEL GEAR TYPE

Did the vessel do any of the following (indicate 'Yes' or 'No' with an 'X' for every item)

		Yes	No	pg No.
Observer rights / 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	RS-b Request that an event not be reported by the observer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	RS-c Mistreat other crew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	RS-d Did operator fail to provide observer, while onboard, at no expense to observer or the observer's Government, with food, accommodation, access to safety gear and medical facilities of reasonable standard - equivalent to those normally available to an officer onboard the vessel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Refer to instruction pages for the full wording of all items on this page				
National regulations	NR-a Fish in areas where the vessel is not permitted to fish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	NR-b Target species other than those they are licenced to target	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	NR-c Use a fishing method other than the method the vessel was designed or licensed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	NR-d Not display or present a valid (and current) licence document onboard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	NR-e Transfer or transship fish from or to another vessel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	NR-f Was involved in bunkering activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	NR-g Fail to stow fishing gear when entering areas where vessel is not authorised to fish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WCPFC CMMs	wc-a Fail to comply with any Commission Conservation and Management Measures (CMMs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	wc-b High-grade the catch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	wc-c Fish on FAD during FAD Closure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Logsheet recording - Position Logsheet recording - Catch	LP-a Inaccurately record vessel position on vessel log sheets for sets, hauling and catch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	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)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	LC-a Inaccurately record retained "Target Species" in the Vessel logs [or weekly reports]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	LC-b Inaccurately record "Target Species" Discards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	LC-c Record target species inaccurately [eg. combine bigeye/yellowfin/skipjack catch]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	LC-d Not record bycatch discards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SSIs	si-a Land on deck Species of Special Interest (SSIs) (eg. Marine mammals, turtles seabirds or protected sharks)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	si-b Interact (not land) with SSIs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	PN-a Dispose of any metals, plastics, chemicals or old fishing gear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	PN-b Discharge any oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pollution	PN-c Lose any fishing gear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	PN-d Abandon any fishing gear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	PN-e Fail to report any abandoned gear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sea safety	ss-a Fail to monitor international safety frequencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	ss-b Carry out-of-date safety equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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.

OBSERVER PROGRAMME	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.	Observer trip identification number. Same number for all forms and issued before leaving port.
COASTAL STATE LICENCE (if any)	List the licence number(s) of any current licence issued by a Coastal States (i.e countries where the vessel is licensed to fish).
NATIONALITY OF BOARING VESSEL IF BOARDED AT SEA	If host vessel is boarded by authorities and inspected at sea, what was nationality of the authority?
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 on certificates before 2016. Generally the UVI is the International Marine Organisation number or may be the the Lloyd's Register (LR) no.
UNIQUE VESSEL IDENTIFIER	International Radio Call Sign is issued by the flag 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 recording it. It may also be found on the vessel's licence.
INTERNATIONAL RADIO CALL SIGN (IRCS)	
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:

Observer rights / 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 ?
	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?
	RS-c Mistreat other crew Were there any clear systematic or prejudiced bullying or mistreatment of any crew ?
	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?
National regulations	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.
	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.
	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 why such a copy was used, if possible.
	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
WCPFC CMMs	WC-a Fail to comply with any Commission Conservation and Management measures (CMMs) Has any WCPFC regional regulation (CMM) been breached ?
	WC-b High grade the catch Did the vessel discard target species already on board to make room for better quality, larger size or for a more marketable target species
	WC-c 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, 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.

FORM GEN - 3
(pg 2)

OBSERVER NAME	VESSEL NAME	OBSERVER NATIONALITY
TRIP ID NUMBER	OBSERVER PROGRAMME	

[illegible]

DEBRIEFING STATUS				OBSERVER SIGNATURE	DATE YY / MM / DD
Circle one:	Not Debriefed	Pre-debriefed	Debriefed		

Rev. 2018	
<div> <div>Logsheets recording - Position</div> <div>Logsheets Recording - Catch</div> </div>	<p>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.</p> <p>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 details should be written into the observer report.</p>
	<p>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.</p>
	<p>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.</p>
	<p>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.</p>
	<p>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.</p>
	<p>Not record bycatch discards LC-d Report any attempt to not report any fish, shark, reptile or mammal species - retained or discarded.</p>
	<p>Inaccurately record retained bycatch species LC-e Report if vessel wrongly reports retained bycatch species.</p>
	<p>Inaccurately record discarded bycatch species LC-f Report if vessel wrongly reports discarded bycatch species.</p>
SSIs	<p>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.</p>
	<p>Interact (not land) with SSIs (e.g. Marine mammals, turtle or whale sharks) 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.</p>
<div> <div>Pollution</div> <div>(see MARPOL explanation on GEN-6)</div> </div>	<p>Dispose of any metals, plastics, chemicals or old fishing gear 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 ?</p>
	<p>Discharge any oil PN-b Was any fuel oil spilled or dumped within 50 nautical miles of shore ?</p>
	<p>Lose any fishing gear PN-c Was any fishing gear lost during this trip ?</p>
	<p>Abandon any fishing gear PN-d Was any fishing gear dumped or abandoned by the observer's host vessel ?</p>
	<p>Fail to report any abandoned gear PN-e Did vessel not report any lost fishing gear (IF REQUIRED by the country in which waters it is fishing) ?</p>
Sea safety	<p>Fail to monitor international Safety frequencies 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 voice communications - 2182 kHz VHF marine radio for short range voice communications - Channel 16</p>
	<p>Carry out-of-date safety equipment SS-b Was any of the safety equipment (lifeboats, EPIRBs, etc.) out of survey date or in a bad condition ?</p>

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 .

OBSERVER PROGRAMME:	SPC/FFA REGIONAL OBSERVER VESSEL TRIP MONITORING SUMMARY		FORM GEN - 3 (pg 1)	
REV. 2018		TRIP START DATE YY MM DD		
Observer NAME		<i>This form <u>must</u> be filled in by the observer for every trip</i>		
Obs. NATIONALITY	TRIP ID NUMBER	COASTAL STATE LICENCES (IF ANY)	NATIONALITY OF BOARDING VESSEL IF BOARDED DURING TRIP AT SEA	
VESSEL NAME	COUNTRY REG. #	UVI	IRCS	VESSEL FLAG
				VESSEL GEAR TYPE

Did the vessel do any of the following (indicate 'Yes' or 'No' with an 'X' for every item)

		Yes	No	pg No.
Observer rights / 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		<input type="checkbox"/>
	RS-b	Request that an event not be reported by the observer		<input type="checkbox"/>
	RS-c	Mistreat other crew		<input type="checkbox"/>
	RS-d	Did operator fail to provide observer, while onboard, at no expense to observer or the observer's Government, with food, accommodation, access to safety gear and medical facilities of reasonable standard - equivalent to those normally available to an officer onboard the vessel		<input type="checkbox"/>
Refer to instruction pages for the full wording of all items on this page				
National regulations	NR-a	Fish in areas where the vessel is not permitted to fish		<input type="checkbox"/>
	NR-b	Target species other than those they are licenced to target		<input type="checkbox"/>
	NR-c	Use a fishing method other than the method the vessel was designed or licensed		<input type="checkbox"/>
	NR-d	Not display or present a valid (and current) licence document onboard		<input type="checkbox"/>
	NR-e	Transfer or transship fish from or to another vessel		<input type="checkbox"/>
	NR-f	Was involved in bunkering activities		<input type="checkbox"/>
	NR-g	Fail to stow fishing gear when entering areas where vessel is not authorised to fish		<input type="checkbox"/>
WCPFC CMMs	wc-a	Fail to comply with any Commission Conservation and Management Measures (CMMs)		<input type="checkbox"/>
	wc-b	High-grade the catch		<input type="checkbox"/>
	wc-c	Fish on FAD during FAD Closure		<input type="checkbox"/>
Logsheet recording - Position Logsheet recording - Catch	LP-a	Inaccurately record vessel position on vessel log sheets for sets, hauling and catch		<input type="checkbox"/>
	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)		<input type="checkbox"/>
	LC-a	Inaccurately record retained "Target Species" in the Vessel logs [or weekly reports]		<input type="checkbox"/>
	LC-b	Inaccurately record "Target Species" Discards		<input type="checkbox"/>
	LC-c	Record target species inaccurately [eg. combine bigeye/yellowfin/skipjack catch]		<input type="checkbox"/>
	LC-d	Not record bycatch discards		<input type="checkbox"/>
SSIs	si-a	Land on deck Species of Special Interest (SSIs) (eg. Marine mammals, turtles seabirds or protected sharks)		<input type="checkbox"/>
	si-b	Interact (not land) with SSIs		<input type="checkbox"/>
Pollution	PN-a	Dispose of any metals, plastics, chemicals or old fishing gear		<input type="checkbox"/>
	PN-b	Discharge any oil		<input type="checkbox"/>
	PN-c	Lose any fishing gear		<input type="checkbox"/>
	PN-d	Abandon any fishing gear		<input type="checkbox"/>
	PN-e	Fail to report any abandoned gear		<input type="checkbox"/>
Sea safety	ss-a	Fail to monitor international safety frequencies		<input type="checkbox"/>
	ss-b	Carry out-of-date safety equipment		<input type="checkbox"/>

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.

OBSERVER PROGRAMME	The observer programme/provider you are contracted to (employed by) for this trip.
OBSERVER NAME	As 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.	Observer trip identification number. Same number for all forms and issued before leaving port.
COASTAL STATE LICENCE (if any)	List the licence number(s) of any current licence issued by a Coastal States (i.e countries where the vessel is licensed to fish).
NATIONALITY OF BOARING VESSEL IF BOARDED AT SEA	If host vessel is boarded by authorities and inspected at sea, what was nationality of the authority?
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 on certificates before 2016. Generally the UVI is the International Marine Organisation number or may be the Lloyd's Register (LR) no.
UNIQUE VESSEL IDENTIFIER	International Radio Call Sign is issued by the flag 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 recording it. It may also be found on the vessel's licence.
INTERNATIONAL RADIO CALL SIGN (IRCS)	
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:

Observer rights / 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?
	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?
	RS-c Mistreat other crew Were there any clear systematic or prejudiced bullying or mistreatment of any crew?
	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?
National regulations	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.
	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.
	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 why such a copy was used, if possible.
	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
WCPFC CMMs	WC-a Fail to comply with any Commission Conservation and Management measures (CMMs) Has any WCPFC regional regulation (CMM) been breached?
	WC-b High grade the catch Did the vessel discard target species already on board to make room for better quality, larger size or for a more marketable target species
	WC-c 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, 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.

FORM GEN - 3
(pg 2)

OBSERVER NAME	VESSEL NAME	OBSERVER NATIONALITY
TRIP ID NUMBER	OBSERVER PROGRAMME	

[illegible]

DEBRIEFING STATUS				OBSERVER SIGNATURE	DATE YY / MM / DD
Circle one:	Not Debriefed	Pre-debriefed	Debriefed		

Rev. 2018	
<div> <div>Logsheets recording - Position</div> <div>Logsheets Recording - Catch</div> </div>	<p>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.</p> <p>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 details should be written into the observer report.</p>
	<p>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.</p>
	<p>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.</p>
	<p>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.</p>
	<p>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.</p>
	<p>Not record bycatch discards LC-d Report any attempt to not report any fish, shark, reptile or mammal species - retained or discarded.</p>
	<p>Inaccurately record retained bycatch species LC-e Report if vessel wrongly reports retained bycatch species.</p>
	<p>Inaccurately record discarded bycatch species LC-f Report if vessel wrongly reports discarded bycatch species.</p>
SSIs	<p>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.</p>
	<p>Interact (not land) with SSIs (e.g. Marine mammals, turtle or whale sharks) 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.</p>
<div> <div>Pollution</div> <div>(see MARPOL explanation on GEN-6)</div> </div>	<p>Dispose of any metals, plastics, chemicals or old fishing gear 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 ?</p>
	<p>Discharge any oil PN-b Was any fuel oil spilled or dumped within 50 nautical miles of shore ?</p>
	<p>Lose any fishing gear PN-c Was any fishing gear lost during this trip ?</p>
	<p>Abandon any fishing gear PN-d Was any fishing gear dumped or abandoned by the observer's host vessel ?</p>
	<p>Fail to report any abandoned gear PN-e Did vessel not report any lost fishing gear (IF REQUIRED by the country in which waters it is fishing) ?</p>
Sea safety	<p>Fail to monitor international Safety frequencies 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 voice communications - 2182 kHz VHF marine radio for short range voice communications - Channel 16</p>
	<p>Carry out-of-date safety equipment SS-b Was any of the safety equipment (lifeboats, EPIRBs, etc.) out of survey date or in a bad condition ?</p>

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 .

SPC/FFA REGIONAL OBSERVER CONVERSION FACTORS	FORM GEN-4
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SPC/FFA REGIONAL OBSERVER CONVERSION FACTORS	FORM GEN-4
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REVISÉ 2018

OBSERVER NAME	MEASURING INSTRUMENT	OBSERVER TRIP ID No.	PAGE	OF
VESSEL NAME	MAKE, MODEL AND CAPACITY OF SCALES	SHIP'S START OF TRIP DATE (YYYY/MM/DD)	SHIP'S END OF TRIP DATE (YYYY/MM/DD)	

DETAILS OF WEIGHTS AND MEASUREMENTS COLLECTED									
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[illegible]

CONVERSION FACTORS

OBSERVER NAME	MEASURING INSTRUMENT	OBSERVER TRIP ID No.	PAGE	OF
<div style="border: 1px solid black; padding: 5px; width: fit-content;">This header should be filled in completely</div>	<i>e.g.: SPC 1.5 m Aluminium calipers</i>	<i>e.g.: JMA 97-</i>	<div style="border: 1px solid black; padding: 2px;">This is page 7</div>	<div style="border: 1px solid black; padding: 2px;">7</div> → <div style="border: 1px solid black; padding: 2px;">19</div>
VESSEL NAME	MAKE, MODEL AND CAPACITY OF SCALES	<div style="border: 1px solid black; padding: 2px; display: inline-block;">Don't forget !</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Total number of GEN-4s forms used in the trip was 19</div>		
<i>e.g.: Salzer 100kg dial-faced spring scales</i>				

DETAILS OF WEIGHTS AND MEASUREMENTS COLLECTED																			
SET NO.	LABEL NO.	SHIP'S TIME	SPECIES CODE	LENGTHS (in cm.)						WEIGHTS (in kg.)				WET FIN	PROCESSED WGT.		LANDED WEIGHT		COMMENTS
				UF	US	LF	PF	PS	TL	WHOLE	HEAD	TAIL	GUTS		(kg.)	CODE	(kg.)	CODE	
# 1	3	1720	BET	152	124	—	—	98	—	—	—	4	—	9	72	GG	70	GG	An example

Set No.

Record the relevant set number ie set # 1, 2 etc. There is no need to start a new page for a new set but you must indicate the correct set number for each line. The set number is at the top of the PS-3 and LL-4 form

Label No.

When unable to get **whole** or **processed weight** during the trip attach a label inside the mouth or gut cavity of the fish. When back on shore 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

Ship's Time and Species Code

must be recorded exactly as they are on Catch Monitoring 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 comments field.

Length code describes what parts of the fish or animal are actually measured

Code Description

UF - Upper jaw to fork in tail
US - Upper jaw to second dorsal fin
LF - Lower jaw to fork in tail
PF - Pectoral fin to fork in tail
PS - Pectoral fin to second dorsal fin
TL - 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

Weights:

if <10 kg
aim for accuracy to 0.5 kg (round to nearest whole kg)

if >10kg
aim for accuracy to 1.0 kg

Tunas: Include removed gills with guts when weighing whole weight.

Billfish: Include removed bills with guts when weighing whole weight

Weight codes describe the state of the fish at the time that it was weighed. As such they must not be confused with Fate codes, which describe the final state of the fish.

Code Description

WW - Whole weight
GG - Guttled and gilled
GH - Guttled and headed
GT - Guttled, gilled and tailed
GX - Guttled, headed and tailed
- Guttled only (gills left in)
GO - Not Measured
NM

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 observers 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	FORM GEN-4
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SPC/FFA REGIONAL OBSERVER CONVERSION FACTORS	FORM GEN-4
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REVISÉ 2018

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DETAILS OF WEIGHTS AND MEASUREMENTS COLLECTED									
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[illegible]

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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

2018

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

Date (from PS-2)	Time	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	Buoy/ FAD lifted	FAD as left	Comments / Change details
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FAD materials			net/mesh	Attachments	net/mesh size	Max est. depth	FAD length	FAD width	Buoy serial number	Buoy/FAD ID markings	SSI seen	SSI trapped	
Main materials	size												
			cm								Y / N / U	Y / N / U	

Date (from PS-2)	Time	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	Buoy/ FAD lifted	FAD as left	Comments / Change details
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Main materials	size												
			cm								Y / N / U	Y / N / U	

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Main materials	size												
			cm								Y / N / U	Y / N / U	

Diagrams- label with 'Object number'

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.
2018 (V.2020-03-03)

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.

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.

Buoy serial number.

Record the serial number stamped on the buoy by the manufacturer

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.

FAD as Found, Buoy/ 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 Buoy or FAD or NO to show if the buoy and/or FAD or neither were lifted from water.

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 may 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.

Fad Length & Fad Width

Record dimensions (length and width) of the main 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.

Beacon/FAD markings

Record any ID numbers or other markings painted by the owner to identify the buoy or FAD.

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)

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

2018

OBSERVER NAME:	VESSEL NAME:	OBSERVER TRIP ID NUMBER:	PAGE OF
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Main materials	size												
			cm								Y / N / U	Y / N / U	

Date (from PS-2)	Time	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	Buoy/ FAD lifted	FAD as left	Comments / Change details
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Main materials	size												
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Date (from PS-2)	Time	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	Buoy/ FAD lifted	FAD as left	Comments / Change details
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Main materials	size												
			cm								Y / N / U	Y / N / U	

Diagrams- label with 'Object number'

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.
2018 (V.2020-03-03)

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.

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.

Buoy serial number.

Record the serial number stamped on the buoy by the manufacturer

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.

FAD as Found, Buoy/ 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 Buoy or FAD or NO to show if the buoy and/or FAD or neither were lifted from water.

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 may 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.

Fad Length & Fad Width

Record dimensions (length and width) of the main 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.

Beacon/FAD markings

Record any ID numbers or other markings painted by the owner to identify the buoy or FAD.

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)

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

2018

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

Date (from PS-2)	Time	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	Buoy/ FAD lifted	FAD as left	Comments / Change details
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Diagrams- label with 'Object number'

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2018 (V.2020-03-03)

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

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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.

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Record the serial number stamped on the buoy by the manufacturer

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.

FAD as Found, Buoy/ 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 Buoy or FAD or NO to show if the buoy and/or FAD or neither were lifted from water.

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.

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

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If there are any attachments at all always make an estimate even if estimating depth is very difficult. - comment on the difficulty.

Fad Length & Fad Width

Record dimensions (length and width) of the main 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.

Beacon/FAD markings

Record any ID numbers or other markings painted by the owner to identify the buoy or FAD.

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)

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.

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FAD/PAYAO and FLOATING OBJECTS INFORMATION RECORD

Form GEN-5

2018

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

Date (from PS-2)	Time	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	Buoy/ FAD lifted	FAD as left	Comments / Change details
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Main materials	size												
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Date (from PS-2)	Time	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	Buoy/ FAD lifted	FAD as left	Comments / Change details
											Buoy/FAD/No		
FAD materials			net/mesh	Attachments	net/mesh size	Max est. depth	FAD length	FAD width	Buoy serial number	Buoy/FAD ID markings	SSI seen	SSI trapped	
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Date (from PS-2)	Time	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	Buoy/ FAD lifted	FAD as left	Comments / Change details
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Main materials	size												
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Diagrams- label with 'Object number'

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.
2018 (V.2020-03-03)

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.

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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.

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.

Buoy serial number.

Record the serial number stamped on the buoy by the manufacturer

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.

FAD as Found, Buoy/ 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 Buoy or FAD or NO to show if the buoy and/or FAD or neither were lifted from water.

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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.

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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.

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

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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.

Fad Length & Fad Width

Record dimensions (length and width) of the main 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.

Beacon/FAD markings

Record any ID numbers or other markings painted by the owner to identify the buoy or FAD.

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)

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

2018

OBSERVER NAME:	VESSEL NAME:	OBSERVER TRIP ID NUMBER:	PAGE OF
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Date (from PS-2)	Time	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	Buoy/ FAD lifted	FAD as left	Comments / Change details
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Diagrams- label with 'Object number'

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

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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

2018

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

Date (from PS-2)	Time	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	Buoy/ FAD lifted	FAD as left	Comments / Change details
											Buoy/FAD/No		
FAD materials			net/mesh	Attachments	net/mesh size	Max est. depth	FAD length	FAD width	Buoy serial number	Buoy/FAD ID markings	SSI seen	SSI trapped	
Main materials	size												
			cm								Y / N / U	Y / N / U	

Date (from PS-2)	Time	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	Buoy/ FAD lifted	FAD as left	Comments / Change details
											Buoy/FAD/No		
FAD materials			net/mesh	Attachments	net/mesh size	Max est. depth	FAD length	FAD width	Buoy serial number	Buoy/FAD ID markings	SSI seen	SSI trapped	
Main materials	size												
			cm								Y / N / U	Y / N / U	

Date (from PS-2)	Time	Set No.	Object number	Origin of FAD	Deployment date	latitude dd°mm.mmm'	N S	and longitude ddd°mm.mmm'	E W	FAD as found	Buoy/ FAD lifted	FAD as left	Comments / Change details
											Buoy/FAD/No		
FAD materials			net/mesh	Attachments	net/mesh size	Max est. depth	FAD length	FAD width	Buoy serial number	Buoy/FAD ID markings	SSI seen	SSI trapped	
Main materials	size												
			cm								Y / N / U	Y / N / U	

Diagrams- label with 'Object number'

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.
2018 (V.2020-03-03)

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.

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.

Buoy serial number.

Record the serial number stamped on the buoy by the manufacturer

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.

FAD as Found, Buoy/ 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 Buoy or FAD or NO to show if the buoy and/or FAD or neither were lifted from water.

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 may 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.

Fad Length & Fad Width

Record dimensions (length and width) of the main 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.

Beacon/FAD markings

Record any ID numbers or other markings painted by the owner to identify the buoy or FAD.

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)

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

FORM GEN-6

REV. 2018

OBSERVER NAME	VESSEL NAME	OBSERVER ID NUMBER	PAGE OF
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- fill in one form for each pollution incident -

INCIDENT DETAILS

Ship's DATE and TIME					LATITUDE		N / S		LONGITUDE		E / W		EEZ / HARBOUR	
YY	MM	DD	hh	mm	(dd°mm.mmm')				(ddd°mm.mmm')					
WIND DIRECTION		WIND SPEED			SEA CONDITIONS (C, S, M, R)			CURRENT : (knts and direction °)			OBSERVER'S VESSEL ACTIVITY			
NAME OF OFFENDING VESSEL					IRCS		TYPE OF VESSEL		YOUR POSITION FROM OFFENDING VESSEL Compass Bearing Distance (nautical miles)					

WASTE DUMPED OVERBOARD

Material	Tick each box that applies	Describe Type	Describe Quantity
Plastics	<input type="checkbox"/>		
Metals	<input type="checkbox"/>		
Waste oil	<input type="checkbox"/>		
Chemicals	<input type="checkbox"/>		
General garbage (within 12 miles of shoreline)	<input type="checkbox"/>		
describe:			

OIL SPILLAGES AND LEAKAGES

Source	Tick each box that applies	Visual Appearance / Colour	Describe Area and Quantity
Vessel Aground / Collision	<input type="checkbox"/>		
Vessel at Anchor / Berth	<input type="checkbox"/>		
Vessel Underway	<input type="checkbox"/>		
Land based source - Describe source	<input type="checkbox"/>		
Other - please specify			

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?

Y / N

Did you take any photos?

Y / N

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

MARPOL Regulations - 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 abbreviations.
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. <i>Use ship's time as defined in other observer data collection forms</i>
Time (00.00 hrs)	Report the time using the 24hr clock.
Latitude / Longitude	Record the GPS position 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.
Observer's vessel activity	State the host (observer's) vessel activity at the time of the pollution incident. Some activities to consider might be: fishing; transshipping; bunkering; transitting; aground.
Name of offending vessel	Make an effort to record the complete and proper 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 position from offending vessel.	Use the vessel compass to get direction of the offending vessel from the obs.' vessel. The radar can be used to get an exact distance in nautical miles. Otherwise give your best estimate.
WASTE DUMPED OVERBOARD	
Material	Tick the appropriate data field to show which types of materials were dumped. Only a maximum of two materials if more than one material type 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 separately.
Describe type	Give as good a description as possible of the type of dumped material. E.g.: - plastic bags; bait boxes plastic strapping; bait boxes plastic bags; etc.
Describe Quantities	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 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 distance.
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.
Abandoned or Lost Fishing Gear	
Source	There is no tick box. Indicate the source of the abandoned/ lost fishing gear by completing 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'.
Source - Lost during fishing	Use this line if the gear was <u>accidentally</u> lost from the observer's vessel during this trip and the vessel tried to search and recover the gear.
Source - Abandoned	Use this line if the gear was <u>deliberately</u> abandoned from the observer's vessel during the trip, or similarly the vessel made no effort to retrieve the gear.
Source - Dumped	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).
Activity	Record your vessel's activity when gear was lost, abandoned or dumped. This might be setting, hauling, steaming etc.
Describe Gear	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 monofilament branchline, no hooks
Estimate Quantify	Refer to the total area in square meters. Mention the length, breadth and width.

SPC/FFA REGIONAL OBSERVER POLLUTION REPORT

FORM GEN-6

REV. 2018

OBSERVER NAME	VESSEL NAME	OBSERVER ID NUMBER	PAGE OF
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- fill in one form for each pollution incident -

INCIDENT DETAILS

Ship's DATE and TIME					LATITUDE		N / S		LONGITUDE		E / W		EEZ / HARBOUR	
YY	MM	DD	hh	mm	(dd°mm.mmm')				(ddd°mm.mmm')					
WIND DIRECTION		WIND SPEED			SEA CONDITIONS (C, S, M, R)			CURRENT : (knts and direction °)			OBSERVER'S VESSEL ACTIVITY			
NAME OF OFFENDING VESSEL					IRCS		TYPE OF VESSEL		YOUR POSITION FROM OFFENDING VESSEL Compass Bearing Distance (nautical miles)					

WASTE DUMPED OVERBOARD

Material	Tick each box that applies	Describe Type	Describe Quantity
Plastics	<input type="checkbox"/>		
Metals	<input type="checkbox"/>		
Waste oil	<input type="checkbox"/>		
Chemicals	<input type="checkbox"/>		
General garbage (within 12 miles of shoreline)	<input type="checkbox"/>		
describe:			

OIL SPILLAGES AND LEAKAGES

Source	Tick each box that applies	Visual Appearance / Colour	Describe Area and Quantity
Vessel Aground / Collision	<input type="checkbox"/>		
Vessel at Anchor / Berth	<input type="checkbox"/>		
Vessel Underway	<input type="checkbox"/>		
Land based source - Describe source	<input type="checkbox"/>		
Other - please specify			

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?

Y / N

Did you take any photos?

Y / N

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

MARPOL Regulations - state

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POLLUTION REPORT

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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 abbreviations.
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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.
Observer's vessel activity	State the host (observer's) vessel activity at the time of the pollution incident. Some activities to consider might be: fishing; transshipping; bunkering; transitting; aground.
Name of offending vessel	Make an effort to record the complete and proper 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 position from offending vessel.	Use the vessel compass to get direction of the offending vessel from the obs.' vessel. The radar can be used to get an exact distance in nautical miles. Otherwise give your best estimate.
WASTE DUMPED OVERBOARD	
Material	Tick the appropriate data field to show which types of materials were dumped. Only a maximum of two materials if more than one material type 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 separately.
Describe type	Give as good a description as possible of the type of dumped material. E.g.: - plastic bags; bait boxes plastic strapping; bait boxes plastic bags; etc.
Describe Quantities	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 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 distance.
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.
Abandoned or Lost Fishing Gear	
Source	There is no tick box. Indicate the source of the abandoned/ lost fishing gear by completing 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'.
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Source - Dumped	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).
Activity	Record your vessel's activity when gear was lost, abandoned or dumped. This might be setting, hauling, steaming etc.
Describe Gear	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 monofilament branchline, no hooks
Estimate Quantify	Refer to the total area in square meters. Mention the length, breadth and width.

SPC/FFA REGIONAL OBSERVER POLLUTION REPORT

FORM GEN-6

REV. 2018

OBSERVER NAME	VESSEL NAME	OBSERVER ID NUMBER	PAGE OF
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- fill in one form for each pollution incident -

INCIDENT DETAILS

Ship's DATE and TIME					LATITUDE		N / S		LONGITUDE		E / W		EEZ / HARBOUR	
YY	MM	DD	hh	mm	(dd°mm.mmm')				(ddd°mm.mmm')					
WIND DIRECTION		WIND SPEED			SEA CONDITIONS (C, S, M, R)			CURRENT : (knts and direction °)			OBSERVER'S VESSEL ACTIVITY			
NAME OF OFFENDING VESSEL					IRCS		TYPE OF VESSEL		YOUR POSITION FROM OFFENDING VESSEL Compass Bearing Distance (nautical miles)					

WASTE DUMPED OVERBOARD

Material	Tick each box that applies	Describe Type	Describe Quantity
Plastics	<input type="checkbox"/>		
Metals	<input type="checkbox"/>		
Waste oil	<input type="checkbox"/>		
Chemicals	<input type="checkbox"/>		
General garbage (within 12 miles of shoreline)	<input type="checkbox"/>		
describe:			

OIL SPILLAGES AND LEAKAGES

Source	Tick each box that applies	Visual Appearance / Colour	Describe Area and Quantity
Vessel Aground / Collision	<input type="checkbox"/>		
Vessel at Anchor / Berth	<input type="checkbox"/>		
Vessel Underway	<input type="checkbox"/>		
Land based source - Describe source	<input type="checkbox"/>		
Other - please specify			

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?

Y / N

Did you take any photos?

Y / N

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

--

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POLLUTION REPORT

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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 abbreviations.
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
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Latitude / Longitude	Record the GPS position 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
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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.
Observer's vessel activity	State the host (observer's) vessel activity at the time of the pollution incident. Some activities to consider might be: fishing; transshipping; bunkering; transitting; aground.
Name of offending vessel	Make an effort to record the complete and proper 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.
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Type of vessel	Consider the full vessel and aircraft codes on the front of Form GEN-1.
Your position from offending vessel.	Use the vessel compass to get direction of the offending vessel from the obs.' vessel. The radar can be used to get an exact distance in nautical miles. Otherwise give your best estimate.
WASTE DUMPED OVERBOARD	
Material	Tick the appropriate data field to show which types of materials were dumped. Only a maximum of two materials if more than one material type 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 separately.
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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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Source - Dumped	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).
Activity	Record your vessel's activity when gear was lost, abandoned or dumped. This might be setting, hauling, steaming etc.
Describe Gear	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 monofilament branchline, no hooks
Estimate Quantify	Refer to the total area in square meters. Mention the length, breadth and width.

SPC/FFA REGIONAL OBSERVER POLLUTION REPORT

FORM GEN-6

REV. 2018

OBSERVER NAME	VESSEL NAME	OBSERVER ID NUMBER	PAGE OF
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- fill in one form for each pollution incident -

INCIDENT DETAILS

Ship's DATE and TIME					LATITUDE		N / S		LONGITUDE		E / W		EEZ / HARBOUR	
YY	MM	DD	hh	mm	(dd°mm.mmm')				(ddd°mm.mmm')					
WIND DIRECTION		WIND SPEED			SEA CONDITIONS (C, S, M, R)			CURRENT : (knts and direction °)			OBSERVER'S VESSEL ACTIVITY			
NAME OF OFFENDING VESSEL					IRCS		TYPE OF VESSEL		YOUR POSITION FROM OFFENDING VESSEL Compass Bearing Distance (nautical miles)					

WASTE DUMPED OVERBOARD

Material	Tick each box that applies	Describe Type	Describe Quantity
Plastics	<input type="checkbox"/>		
Metals	<input type="checkbox"/>		
Waste oil	<input type="checkbox"/>		
Chemicals	<input type="checkbox"/>		
General garbage (within 12 miles of shoreline)	<input type="checkbox"/>		
describe:			

OIL SPILLAGES AND LEAKAGES

Source	Tick each box that applies	Visual Appearance / Colour	Describe Area and Quantity
Vessel Aground / Collision	<input type="checkbox"/>		
Vessel at Anchor / Berth	<input type="checkbox"/>		
Vessel Underway	<input type="checkbox"/>		
Land based source - Describe source	<input type="checkbox"/>		
Other - please specify			

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?

Y / N

Did you take any photos?

Y / N

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

--

MARPOL Regulations - 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 abbreviations.
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. <i>Use ship's time as defined in other observer data collection forms</i>
Time (00.00 hrs)	Report the time using the 24hr clock.
Latitude / Longitude	Record the GPS position 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.
Observer's vessel activity	State the host (observer's) vessel activity at the time of the pollution incident. Some activities to consider might be: fishing; transshipping; bunkering; transitting; aground.
Name of offending vessel	Make an effort to record the complete and proper 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 position from offending vessel.	Use the vessel compass to get direction of the offending vessel from the obs.' vessel. The radar can be used to get an exact distance in nautical miles. Otherwise give your best estimate.
WASTE DUMPED OVERBOARD	
Material	Tick the appropriate data field to show which types of materials were dumped. Only a maximum of two materials if more than one material type 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 separately.
Describe type	Give as good a description as possible of the type of dumped material. E.g.: - plastic bags; bait boxes plastic strapping; bait boxes plastic bags; etc.
Describe Quantities	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 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 distance.
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.
Abandoned or Lost Fishing Gear	
Source	There is no tick box. Indicate the source of the abandoned/ lost fishing gear by completing 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'.
Source - Lost during fishing	Use this line if the gear was <u>accidentally</u> lost from the observer's vessel during this trip and the vessel tried to search and recover the gear.
Source - Abandoned	Use this line if the gear was <u>deliberately</u> abandoned from the observer's vessel during the trip, or similarly the vessel made no effort to retrieve the gear.
Source - Dumped	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).
Activity	Record your vessel's activity when gear was lost, abandoned or dumped. This might be setting, hauling, steaming etc.
Describe Gear	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 monofilament branchline, no hooks
Estimate Quantify	Refer to the total area in square meters. Mention the length, breadth and width.

SPC/FFA REGIONAL OBSERVER POLLUTION REPORT

FORM GEN-6

REV. 2018

OBSERVER NAME	VESSEL NAME	OBSERVER ID NUMBER	PAGE OF
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- fill in one form for each pollution incident -

INCIDENT DETAILS

Ship's DATE and TIME					LATITUDE		N / S		LONGITUDE		E / W		EEZ / HARBOUR	
YY	MM	DD	hh	mm	(dd°mm.mmm')				(ddd°mm.mmm')					
WIND DIRECTION		WIND SPEED			SEA CONDITIONS (C, S, M, R)			CURRENT : (knts and direction °)			OBSERVER'S VESSEL ACTIVITY			
NAME OF OFFENDING VESSEL					IRCS		TYPE OF VESSEL		YOUR POSITION FROM OFFENDING VESSEL Compass Bearing Distance (nautical miles)					

WASTE DUMPED OVERBOARD

Material	Tick each box that applies	Describe Type	Describe Quantity
Plastics	<input type="checkbox"/>		
Metals	<input type="checkbox"/>		
Waste oil	<input type="checkbox"/>		
Chemicals	<input type="checkbox"/>		
General garbage (within 12 miles of shoreline)	<input type="checkbox"/>		
describe:			

OIL SPILLAGES AND LEAKAGES

Source	Tick each box that applies	Visual Appearance / Colour	Describe Area and Quantity
Vessel Aground / Collision	<input type="checkbox"/>		
Vessel at Anchor / Berth	<input type="checkbox"/>		
Vessel Underway	<input type="checkbox"/>		
Land based source - Describe source	<input type="checkbox"/>		
Other - please specify			

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?

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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.
Observer's vessel activity	State the host (observer's) vessel activity at the time of the pollution incident. Some activities to consider might be: fishing; transshipping; bunkering; transitting; aground.
Name of offending vessel	Make an effort to record the complete and proper 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.
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Source	Tick to indicate where the spillage or leak came from
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Source - Dumped	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).
Activity	Record your vessel's activity when gear was lost, abandoned or dumped. This might be setting, hauling, steaming etc.
Describe Gear	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 monofilament branchline, no hooks
Estimate Quantify	Refer to the total area in square meters. Mention the length, breadth and width.

**FORM
SUP-3**

OBSERVER TRIP ID No.

[illegible]

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	TR
Vessel departs port with observer	VD	Vessel in Port (observer onboard)	VP
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



**FORM
SUP-4**

REV 2018

JULY 2010			
OBSERVER NAME	VESSEL NAME	IRCS	PAGE OF

Advance Claim Ref No.		NAME OF OBSERVER PROGRAMME or FISHING COMPANY MAKING ADVANCE	NAME OF PERSON PROVIDING ADVANCE	SIGNATURE (of person making advance)	State TYPE of ADVANCE (i.e. cash /other)	Curr- ency	Amount
ADV #	Observer Trip ID No						
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

Claim item [number (#) each receipt]		Curr-ency	Amount	Claim item [number (#) each receipt]		Curr-ency	Amount
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			

Tick one box only:

<input type="checkbox"/>	Please make payments to: <div style="text-align: center;"><i>(payee's name)</i></div> <div style="text-align: center;"><i>(bank)</i></div>		<div style="border: 1px solid black; height: 40px; margin-bottom: 5px;"></div> <i>observer's signature</i>
<input type="checkbox"/>	Please arrange for funds to be available on presentation of passport		

Written report and data was sent by: on Register ed mail

(hand caried, courier, express mail, etc.)

(date)

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

Advance Claim Reference Number	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 photocopy 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.
SIGNATURE (of person making advance)	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. **Under no circumstances send anything by normal or surface mail**
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** –
6. 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 transshipment?

- 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

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

China

1. China Fisheries Association, BEIJING
(Contact: Zhao Gang)
2. Ningbo Poseidon Food Company NINGBO
(Contact: Shirley Chen)

Cook Islands

1. Ministry of Marine Resources RAROTONGA
(Contact: Andrew Jones)

Ecuador

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

Federated States of Micronesia

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

Fiji

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

Guam

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

Indonesia

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

Japan

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

Kiribati

1. 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

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

New Caledonia

1. Secretariat of the Pacific Community NOUMEA
(Contact: Caroline Sanchez)

Palau

1. Bureau of Marine Resources KOROR
(Contact: Kathy Sisor)

Papua New Guinea

1. National Fisheries Authority PORT MORESBY
(Contact: Benthly Sabub) National Fisheries Authority LAE
(Contact: Walter Rupio / 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)
5. National Fisheries Authority WEWAK (Contact: Andrew
Rahiria)
6. South Sea Tuna Corporation WEWAK
(Contact: Eldwin Umusig)
7. National Fisheries Authority RABAUL (Contact: Ellison
Semi / Ezekiel Pue)

Palau

1. Bureau of Marine Resources KOROR
(Contact: Kathy Sisor)

Philippines

1. Bureau of Fisheries & Aquatic Resources MANILA
(Contact: Noel Barut / Elaine Garvilles)
2. Bureau of Fisheries & Aquatic Resources GENERAL
SANTOS (Contact: Glennville Castrence / Ian Medel Lipio)
3. Bureau of Fisheries & Aquatic Resources DAVAO
(Contact: Front Office)

Seychelles

1. Indian Ocean Tuna Commission SEYCHELLES
(Contact: Julien Million)

Solomon Islands

1. 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)
2. Overseas Fisheries Development Council KAOHSIUNG
(Contact: Peter Ho (何勝初))

Thailand

1. Thailand Department of Fisheries, SAMUTSAKOM
(Contact: Suwimon Keerativiriyaporn)

United States of America

1. Inter American Tropical Tuna Commission SAN DIEGO
(Contact: Dan Fuller)
2. 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)



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(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.
- If there is an archival tag or a white tag, do not remove the tags from the fish. Place the fish in a freezer. In the PS2, note all information related to the behaviour of the school. Contact SPC immediately. Bring the fish to the closest fisheries office for storage and sampling of the fish.
- 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. See above for further information regarding archival tagged fish.
- 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
- If there were several sets in the well, report the period and the area of catch 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.
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(Contact: Janelle Anson)
2. National Oceanic Resource Management Authority
POHNPEI (Contact: Ricky Nauruhn)

Fiji

1. Pacific Community SUVA (Contact: Front Office)
2. Ministry of Fisheries SUVA (Contact: Apenisa
Sauturaga)

Indonesia

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

Japan

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

Kiribati

1. 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 Institute for Fisheries Science BUSAN
(Contact: Seon Jae Wang (황선재))

Marshall Islands

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

New Caledonia

1. Pacific Community NOUMEA
(Contact: Caroline Sanchez)

Papua New Guinea

1. National Fisheries Authority PORT MORESBY
(Contact: Benthly Sabub)
2. National Fisheries Authority LAE (Contact: Billy
Pangi)
3. Frabelle PNG LAE (Contact: Celia Batobato)

4. National Fisheries Authority MADANG
(Contact: Clement Kuag)
5. RD Fishing PNG VIDAR (Contact: Sammy Rivera)
6. National Fisheries Authority WEWAK
(Contact: Andrew Rahiria)
7. South Sea Tuna Corporation WEWAK
(Contact: Eldwin Umusig)
8. National Fisheries Authority RABUL
(Contact: Ellison Semi / Ezekiel Pue)

Palau

1. Bureau of Marine Resources KOROR
(Contact: Kathy Sisor)

Philippines

1. Bureau of Fisheries & Aquatic Resources MANILA
(Contact: Noel Barut / Elaine Garvilles)
2. Bureau of Fisheries & Aquatic Resources GENERAL
SANTOS (Contact: Glennville Castrence / Ian Medel
Lipio)
3. Bureau of Fisheries & Aquatic Resources DAVAO
(Contact: Front Office)

Seychelles

1. Indian Ocean Tuna Commission SEYCHELLES
(Contact: Paul Debruyn)

Solomon Islands

1. Ministry of Fisheries & Marine Resources HONIARA
(Contact: Patteson Clifford / 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. 高雄 台灣區遠洋鯧鮪圍網漁船魚類輸出業同業公會 (聯繫：蔡佳昌)
2. 高雄 台灣區遠洋鮪延繩釣漁船魚類輸出業同業公會 (聯繫：林涵宇)
3. 台北 中華民國對外漁業合作發展協會 (聯繫：劉弘一 / 於仁汾)

Thailand

1. Thailand Department of Fisheries, SAMUTSAKOM
(Contact: Suwimon Keerativiriyaporn)

Tuvalu

1. Ministry of Natural Resources, FUNAFUTI
(Contact: Onosai Takataka)

United States of America

1. Inter American Tropical Tuna Commission SAN
DIEGO (Contact: Dan Fuller)
2. 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)



For advices and for archival tag recovery, contact the Tagging Recovery Officer Coordinator:
Caroline Sanchez - Carolines@spc.int / (+687 242227)

Note the 1st date when the tag has been found.
If you don't have an exact date, place a dash in the day field and note the month and/or year.

If there is more than 1 tag recovered during the trip, number each page.

WHERE FOUND:

where did you find the tagged species?

☐ Port
☐ Fish market

☐ Cold storage

ACTIVITY WHEN FOUND:

What were you doing when you found the tagged species?

ment

☐ Unloading at port

WELL NUMBER

WHERE FISH FOUND:

(If Applicable)

TAGGED SPECIES INFORMATION

If a tagged fish is found during transfer/transshipment, note the well number.

SPECIES:

SPECIES RELIABILITY:

☐ Confirmed

☒ Guess

Are you sure about the identification?

LENGTH 1 : (cm)

LENGTH 2 : applicable

NO length information ☒

If there is no length, place a cross and move to the next section.

For fish and turtles, note 1 length : UF for tuna species, CL for turtles.

For birds, note 2 lengths BL and WL.

If there is no weight, place a cross and move to the next section.

WEIGHT (kg)

NO weight information ☒

HOW WEIGHED?

☐

Choose one option to describe the processed state.

PROCESSED STATE WHEN WEIGHED:

☐ Whole weight

☐ Gilled & gutted

☐ Other... please specify:

If you know exactly when and where the tagged species was caught.

If you find the tagged specie in a well composed of several sets or if the finder is not sure of position and date of catch.

DATE

Exact ☒

DD MM YY
05 02 11

Estimated ☒

From

DD MM YY
01 03 11

to

DD MM YY
15 03 11

POSITION

Exact ☒

Latitude

dd

mm.mmm

N / S

06

02.300

N

Longitude

ddd

mm.mmm

E / W

140

04.600

E

Estimated ☒

Record 2 lines of latitude and 2 of longitude to form box in which tag was likely recovered

Latitude

Max

05°

02.500

N / S

N

Longitude

ddd

mm.mmm

E / W

E

145

12.300

E

Min

00°

50.600

N / S

N

Longitude

ddd

mm.mmm

E / W

E

150

20.450

E

FISH

Name of the vessel that caught the tagged species

VESSEL NAME:

FISHING METHOD:

If on a PS or PL, enter the school type. If found in well with several school types, place a cross in all options.

SCHOOL TYPE:

TRANSSHIPMENT INFORMATION/ Carrier only (if tag found during transshipment)

If the recovery of a tagged fish involve a carrier/reefer, fill this section. If the unloading/transshipment occurs at port, note the name of the port, if it is at sea note the country code (EEZ of the country).

Country where the recovery will be reported or port where you disembarked.

COUNTRY OF RECOVERY:

TAG PROVIDED WITH THIS FORM

☐ Yes

☒ No

(tag kept for reward)

TYPE OF REWARD

☒ Not given

If you or the finder haven't received a reward, cross "Not Given".

FINDER ADDRESS:

If you can't provide an address, note the fishing company.

Specify if the crew keep the tag and where he will collect his reward.

COMMENTS:

Use this section to record any relevant information not provided on the form. Example: Archival tag number/copy of the data provided to the tag finder/tag traded with another vessel/tags left on the released turtle.

You can attach the tag here :

No. P-48854

SPC NOUMEA - REWARD

www.spc.int/tagging

No. P-48854

Type of tag

Reward

SPC MULTIPLE TAG RECOVERY FORM

MULTIPLE TAGGED FISH FOUND THE SAME DAY, COMING FROM THE SAME SET

REVISED SPC - Feb 2017

DATE WHEN TAG FOUND: YY MM DD
17 8 02

Indicate if you have more than 1 series of multiple tag recoveries.

Note the date when the tags were first found. If you don't have an exact date, place a dash in the day field and note the month and/or year.

WHERE FOUND: ☒ Fishing vessel ☐ Reefer / Transfer / Carrier ☐ Other

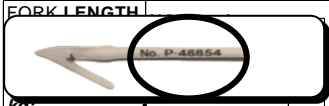
ACTIVITY WHEN FOUND: ☒ Fishing ☐ at port ☐ Other

What were you doing when you found the tagged fish?

WELL NUMBER (If Applicable) WHERE FISH FOUND:

TAG NUMBER: SPECIES: ☒ SKJ ☐ BET ☐ YFT ☐ Other

If the tagged fish come from a well, note the number and position (Eg; S2 for starboard well #2). It is very important to note this information first and then using your workbook or the vessel logbook you can determine which sets composed this well.

FORK LENGTH cm: 

Select the species code.

TAG NUMBER: P-234587

SPECIES: ☐ SKJ ☐ BET ☐ YFT ☐ Other Please specify:

FISH IDENTIFICATION: ☐ Confirmed ☐ Guessed

FORK LENGTH cm: NO length information ☐

HOW MEASURED: ☐ Measuring tool ☐ Estimated

STATE WHEN MEASURED:

If the tagged fish is found by the crew and the fish is not presented to you, are you sure about the species identification?

FISH WEIGHT kg: NO weight information ☐

HOW WEIGHED: ☐ Measuring tool ☐ Estimated

STATE WHEN WEIGHED:

TAG NUMBER:

SPECIES: ☐ SKJ ☐ BET ☐ YFT ☐ Other Please specify:

FISH IDENTIFICATION: ☐ Confirmed ☐ Guessed

FORK LENGTH cm: 65

Note the size of the fish, round down to the nearest cm (Eg: 65.7cm=65 cm).

FISH WEIGHT kg: 1.8

If possible, note the exact weight of the fish (Eg: 1.8 kg).

Whole weight ☐

Select 'Fresh' for a tagged fish caught during fishing time. Select 'Frozen' if found during well transfer/unloading.

Were the size and weight measured with an instrument or estimated?

SPECIES: ☐ SKJ ☐ BET ☐ YFT ☐ Other Please specify:

HOW MEASURED: ☐ Measuring tool ☐ Estimated

STATE WHEN MEASURED: ☐ Fresh ☐ Frozen

HOW WEIGHED: ☐ Measuring tool ☐ Estimated

STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

Select the processed state of the fish when weighed.

TAG NUMBER:

SPECIES: ☐ SKJ ☐ BET ☐ YFT ☐ Other Please specify:

FISH IDENTIFICATION: ☐ Confirmed ☐ Guessed

FORK LENGTH cm: NO length information ☒

HOW MEASURED: ☐ Measuring tool ☐ Estimated

STATE WHEN MEASURED: ☐ Fresh ☐ Frozen

MEASURED BY: ☐ Observer ☐ Other

FISH WEIGHT kg: NO weight information ☒

HOW WEIGHED: ☐ Measuring tool ☐ Estimated

STATE WHEN WEIGHED: ☐ Whole weight ☐ Gilled & gutted ☐ Other

If there is no length, place a cross and move to the next section.

If there is no weight, place a cross and move to the next section.

WHEN TO USE AND HOW TO COMPLETE THE MULTIPLE TAG RECOVERY FORM

This multiple tag recovery form is meant to be used when a finder recovers up to 8 tagged fish the **same day**, either from the **same set** during fishing time or from the **same well** during transfer or unloading.

The fishery and finder information must be filled at the back of the form.

SINGLE TAG RECOVERY FORM

PAGE / OF

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CRITICAL TAG INFORMATION

TAG NUMBER:	DATE WHEN TAG FOUND:		
	YY	MM	DD

WHERE FOUND:	<input type="checkbox"/> Fishing vessel	<input type="checkbox"/> Reefer / Transfer / Carrier	<input type="checkbox"/> Port Fish market	<input type="checkbox"/> Cold storage
ACTIVITY WHEN FOUND:	<input type="checkbox"/> Fishing	<input type="checkbox"/> Well transfer	<input type="checkbox"/> Transshipment	<input type="checkbox"/> Unloading at port
				WELL NUMBER WHERE FISH FOUND: (If Applicable)

TAGGED SPECIES INFORMATION

SPECIES:		SPECIES RELIABILITY: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed	
LENGTH 1 : (cm)	LENGTH 2 : if applicable (cm)	NO length Information <input type="checkbox"/>	HOW MEASURED? <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated
		WHO MEASURED? <input type="checkbox"/> Port sampler <input type="checkbox"/> Observer <input type="checkbox"/> Other.... <i>Please specify:</i>	
Length 1 code:	Length 2 code:	PROCESSED STATE WHEN MEASURED: <input type="checkbox"/> Alive <input type="checkbox"/> Fresh and dead <input type="checkbox"/> Frozen <input type="checkbox"/> Frozen then thawed	
WEIGHT: (kg)	NO weight information <input type="checkbox"/>	HOW WEIGHED? <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated	
		PROCESSED STATE WHEN WEIGHED: <input type="checkbox"/> Whole weight <input type="checkbox"/> Gilled & gutted <input type="checkbox"/> Other.... <i>Please specify:</i>	

TAGGED SPECIES CATCH INFORMATION / Date and position when tagged species was caught by the fishing vessel

DATE	Exact <input type="checkbox"/>	YY	MM	DD	Estimated <input type="checkbox"/>	From	YY	MM	DD	to	YY	MM	DD
POSITION	Exact <input type="checkbox"/>	dd mm.mmm N / S			Estimated <input type="checkbox"/>	Record 2 lines of latitude and 2 of longitude to form area of catch (box) in which tag was likely recovered							
		Latitude				dd mm.mmm N / S			ddd mm.mmm E / W				
		Longitude				Latitude			Longitude				
		ddd mm.mmm E / W				ddd mm.mmm E / W			ddd mm.mmm E / W				
or DESCRIBE FISHING AREA (If NO Latitude and longitude provided above):													

FISHERY INFORMATION (Catcher / Fishing vessel that caught the tagged species)

VESSEL NAME:	FLAG:
FISHING METHOD:	<input type="checkbox"/> Longline <input type="checkbox"/> Purse seine <input type="checkbox"/> Troll <input type="checkbox"/> Handline <input type="checkbox"/> Gill net Other: _____
SCHOOL TYPE:	<input type="checkbox"/> Log <input type="checkbox"/> Free school <input type="checkbox"/> Anchored FAD <input type="checkbox"/> Drifting FAD FAD no: _____

TRANSSHIPMENT INFORMATION/ Carrier only (fill this section only if tagged species found during set share / transshipment / unloading)

NAME OF CARRIER:	FLAG:	DATE OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER:	YY	MM	DD	to	YY	MM	DD
LOCATION OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER (EEZ/Port):	TRANSHIPMENT POSITION:	Latitude	dd	mm.mmm	N / S	Longitude	ddd	mm.mmm	E / W

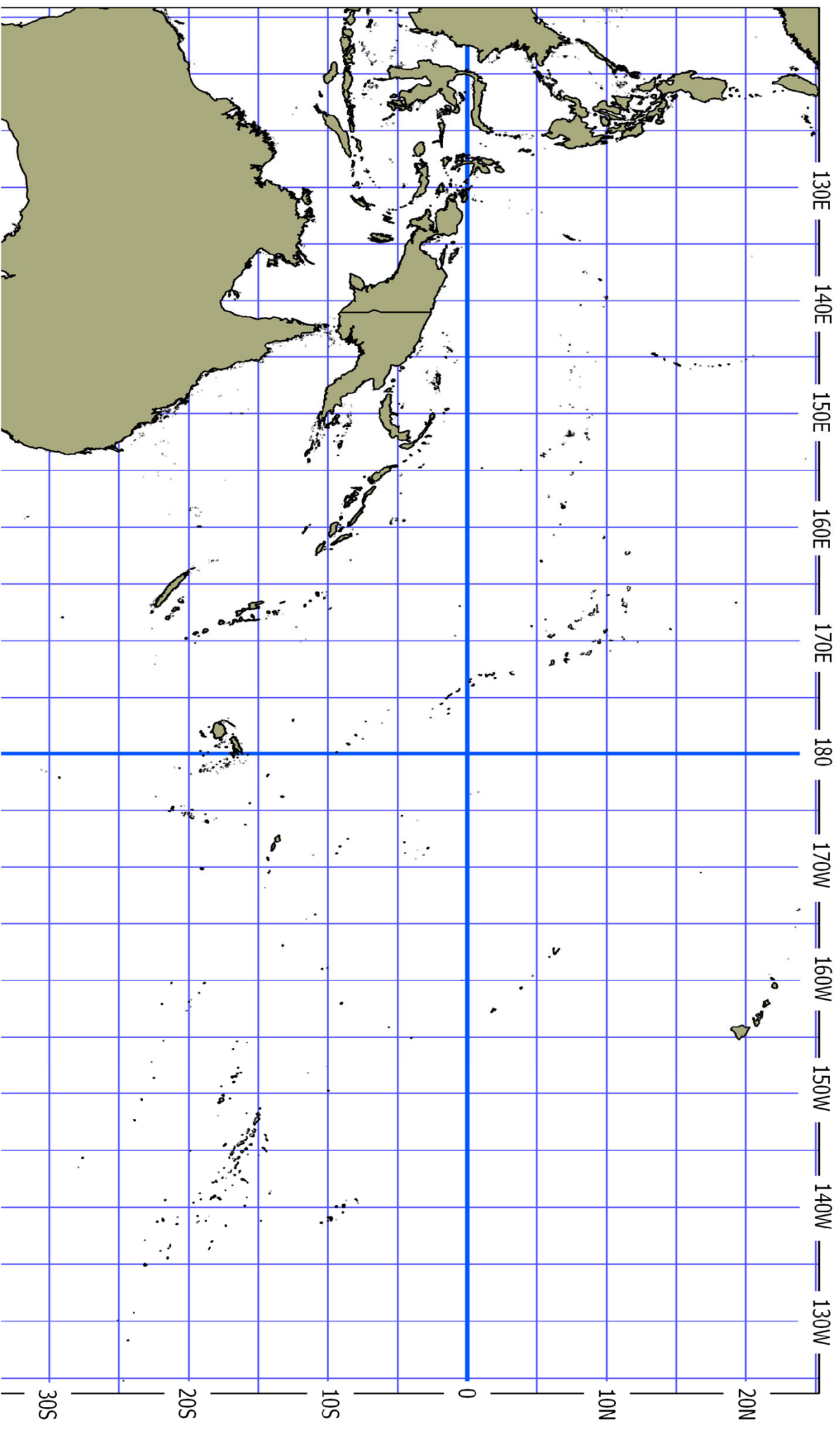
FINDER INFORMATION / finder details for lottery

FINDER NAME:	FINDER ADDRESS:
COUNTRY OF RECOVERY:	RECOVERY INFORMATION RECEIVED AT/ON (Cannery/Company/Agency name/vessel name):
TAG PROVIDED WITH THIS FORM:	<input type="checkbox"/> Yes <input type="checkbox"/> No (tag kept by finder IF NO, specify expected reward for reward purpose) location for finder (Port/Country):
TYPE OF REWARD:	<input type="checkbox"/> Not given <input type="checkbox"/> T-shirt <input type="checkbox"/> Cap <input type="checkbox"/> Cash - amount: _____ FORM COMPLETED BY:

COMMENTS: IF A TAGGED TURTLE / TAGGED BIRD WAS RELEASED ALIVE, DID YOU LEAVE THE TAGS ON ? Specify below.

ARCHIVAL TAG NUMBER (If applicable):

Type of tag	Reward
Yellow tag, Orange tag or Green tag	- 10\$ or Cap or T-shirt
Internal archival tag	- 250\$



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 latitude and longitude on the first page.

Email: tagging@spc.int
Website: www.spc.int/tagging

SINGLE TAG RECOVERY FORM

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REVISED SPC - Feb. 2017

CRITICAL TAG INFORMATION

TAG NUMBER:	DATE WHEN TAG FOUND:		
	YY	MM	DD

WHERE FOUND:	<input type="checkbox"/> Fishing vessel	<input type="checkbox"/> Reefer / Transfer / Carrier	<input type="checkbox"/> Port Fish market	<input type="checkbox"/> Cold storage
ACTIVITY WHEN FOUND:	<input type="checkbox"/> Fishing	<input type="checkbox"/> Well transfer	<input type="checkbox"/> Transshipment	<input type="checkbox"/> Unloading at port
				WELL NUMBER WHERE FISH FOUND: (If Applicable)

TAGGED SPECIES INFORMATION

SPECIES:		SPECIES RELIABILITY: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed	
LENGTH 1 : (cm)	LENGTH 2 : if applicable (cm)	NO length Information <input type="checkbox"/>	HOW MEASURED? <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated
		WHO MEASURED? <input type="checkbox"/> Port sampler <input type="checkbox"/> Observer <input type="checkbox"/> Other.... <i>Please specify:</i>	
Length 1 code:	Length 2 code:	PROCESSED STATE WHEN MEASURED: <input type="checkbox"/> Alive <input type="checkbox"/> Fresh and dead <input type="checkbox"/> Frozen <input type="checkbox"/> Frozen then thawed	
WEIGHT: (kg)	NO weight information <input type="checkbox"/>	HOW WEIGHED? <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated	
		PROCESSED STATE WHEN WEIGHED: <input type="checkbox"/> Whole weight <input type="checkbox"/> Gilled & gutted <input type="checkbox"/> Other.... <i>Please specify:</i>	

TAGGED SPECIES CATCH INFORMATION / Date and position when tagged species was caught by the fishing vessel

DATE	Exact <input type="checkbox"/>	YY	MM	DD	Estimated <input type="checkbox"/>	From	YY	MM	DD	to	YY	MM	DD
POSITION	Exact <input type="checkbox"/>	dd mm.mmm N / S			Estimated <input type="checkbox"/>	Record 2 lines of latitude and 2 of longitude to form area of catch (box) in which tag was likely recovered							
		Latitude				dd mm.mmm N / S			ddd mm.mmm E / W				
		Longitude				Latitude			Longitude				
		ddd mm.mmm E / W				Min			Max				
or DESCRIBE FISHING AREA (If NO Latitude and longitude provided above):													

FISHERY INFORMATION (Catcher / Fishing vessel that caught the tagged species)

VESSEL NAME:	FLAG:
FISHING METHOD:	<input type="checkbox"/> Longline <input type="checkbox"/> Purse seine <input type="checkbox"/> Troll <input type="checkbox"/> Handline <input type="checkbox"/> Gill net Other: _____
SCHOOL TYPE:	<input type="checkbox"/> Log <input type="checkbox"/> Free school <input type="checkbox"/> Anchored FAD <input type="checkbox"/> Drifting FAD FAD no: _____

TRANSSHIPMENT INFORMATION/ Carrier only (fill this section only if tagged species found during set share / transshipment / unloading)

NAME OF CARRIER:	FLAG:	DATE OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER:	YY	MM	DD	to	YY	MM	DD	
LOCATION OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER (EEZ/Port):		TRANSHIPMENT POSITION:	Latitude	dd	mm.mmm	N / S	Longitude	ddd	mm.mmm	E / W

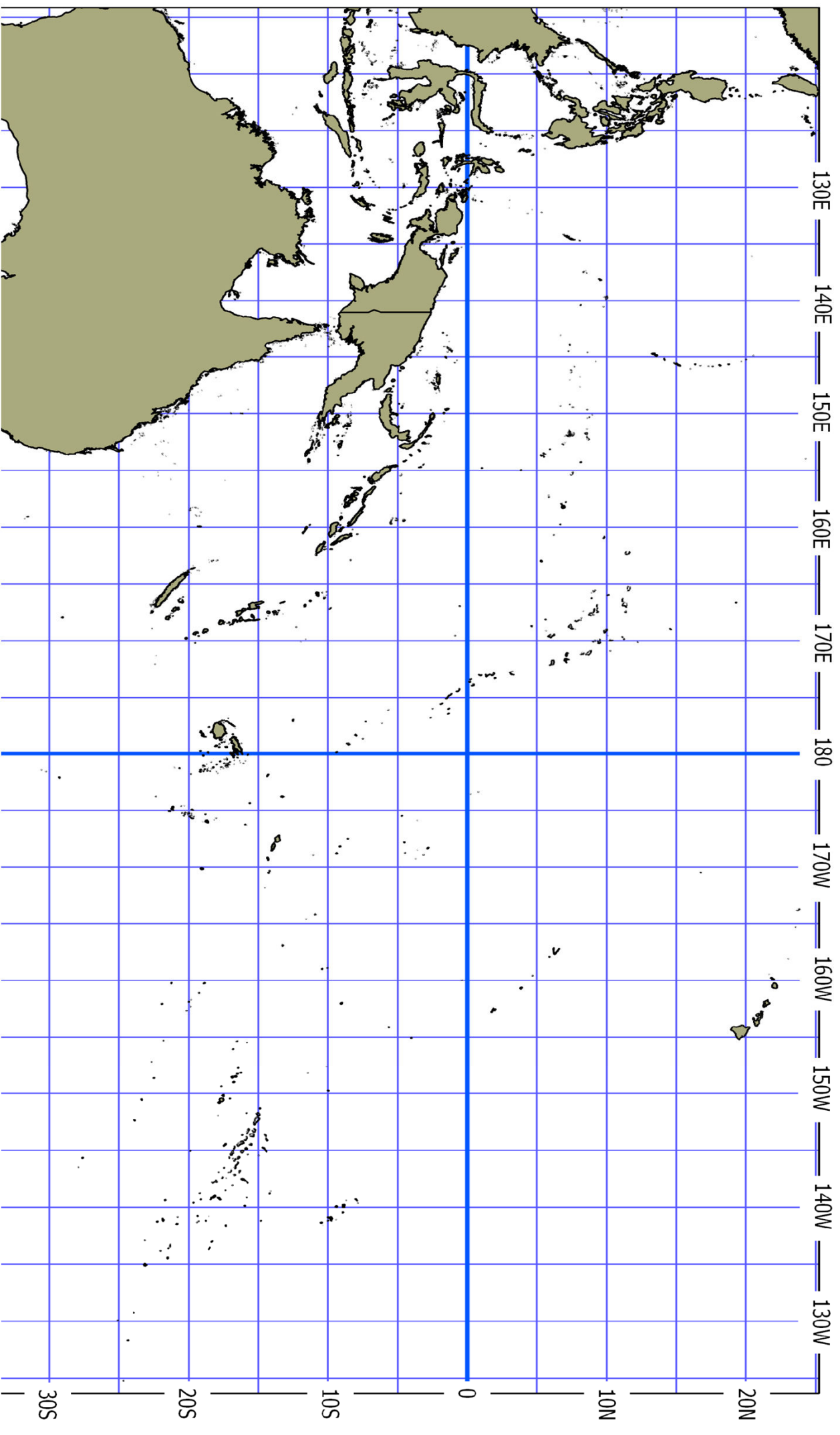
FINDER INFORMATION / finder details for lottery

FINDER NAME:	FINDER ADDRESS:
COUNTRY OF RECOVERY:	RECOVERY INFORMATION RECEIVED AT/ON (Cannery/Company/Agency name/vessel name):
TAG PROVIDED WITH THIS FORM:	<input type="checkbox"/> Yes <input type="checkbox"/> No (tag kept by finder IF NO, specify expected reward for reward purpose) location for finder (Port/Country):
TYPE OF REWARD:	<input type="checkbox"/> Not given <input type="checkbox"/> T-shirt <input type="checkbox"/> Cap <input type="checkbox"/> Cash - amount: _____ FORM COMPLETED BY:

COMMENTS: IF A TAGGED TURTLE / TAGGED BIRD WAS RELEASED ALIVE, DID YOU LEAVE THE TAGS ON ? Specify below.

ARCHIVAL TAG NUMBER (If applicable):

Type of tag	Reward
Yellow tag, Orange tag or Green tag	- 10\$ or Cap or T-shirt
Internal archival tag	- 250\$



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 latitude and longitude on the first page.

Email: tagging@spc.int
Website: www.spc.int/tagging

SINGLE TAG RECOVERY FORM

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CRITICAL TAG INFORMATION

TAG NUMBER:	DATE WHEN TAG FOUND:		
	YY	MM	DD

WHERE FOUND:	<input type="checkbox"/> Fishing vessel	<input type="checkbox"/> Reefer / Transfer / Carrier	<input type="checkbox"/> Port Fish market	<input type="checkbox"/> Cold storage
ACTIVITY WHEN FOUND:	<input type="checkbox"/> Fishing	<input type="checkbox"/> Well transfer	<input type="checkbox"/> Transshipment	<input type="checkbox"/> Unloading at port
				WELL NUMBER WHERE FISH FOUND: (If Applicable)

TAGGED SPECIES INFORMATION

SPECIES:		SPECIES RELIABILITY: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed	
LENGTH 1 : (cm)	LENGTH 2 : if applicable (cm)	NO length Information <input type="checkbox"/>	HOW MEASURED? <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated
		WHO MEASURED? <input type="checkbox"/> Port sampler <input type="checkbox"/> Observer <input type="checkbox"/> Other.... <i>Please specify:</i>	
Length 1 code:	Length 2 code:	PROCESSED STATE WHEN MEASURED: <input type="checkbox"/> Alive <input type="checkbox"/> Fresh and dead <input type="checkbox"/> Frozen <input type="checkbox"/> Frozen then thawed	
WEIGHT: (kg)	NO weight information <input type="checkbox"/>	HOW WEIGHED? <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated	
		PROCESSED STATE WHEN WEIGHED: <input type="checkbox"/> Whole weight <input type="checkbox"/> Gilled & gutted <input type="checkbox"/> Other.... <i>Please specify:</i>	

TAGGED SPECIES CATCH INFORMATION / Date and position when tagged species was caught by the fishing vessel

DATE	Exact <input type="checkbox"/>	YY	MM	DD	Estimated <input type="checkbox"/>	From	YY	MM	DD	to	YY	MM	DD
POSITION	Exact <input type="checkbox"/>	dd mm.mmm N / S			Estimated <input type="checkbox"/>	Record 2 lines of latitude and 2 of longitude to form area of catch (box) in which tag was likely recovered							
		Latitude				dd mm.mmm N / S			ddd mm.mmm E / W				
		ddd mm.mmm E / W				Latitude			ddd mm.mmm E / W				
		Longitude				Latitude			ddd mm.mmm E / W				
or DESCRIBE FISHING AREA (If NO Latitude and longitude provided above):													

FISHERY INFORMATION (Catcher / Fishing vessel that caught the tagged species)

VESSEL NAME:	FLAG:
FISHING METHOD:	<input type="checkbox"/> Longline <input type="checkbox"/> Purse seine <input type="checkbox"/> Troll <input type="checkbox"/> Handline <input type="checkbox"/> Gill net Other: _____
SCHOOL TYPE:	<input type="checkbox"/> Log <input type="checkbox"/> Free school <input type="checkbox"/> Anchored FAD <input type="checkbox"/> Drifting FAD FAD no: _____

TRANSSHIPMENT INFORMATION/ Carrier only (fill this section only if tagged species found during set share / transshipment / unloading)

NAME OF CARRIER:	FLAG:	DATE OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER:	YY	MM	DD	to	YY	MM	DD
LOCATION OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER (EEZ/Port):	TRANSHIPMENT POSITION:	Latitude	dd	mm.mmm	N / S	Longitude	ddd	mm.mmm	E / W

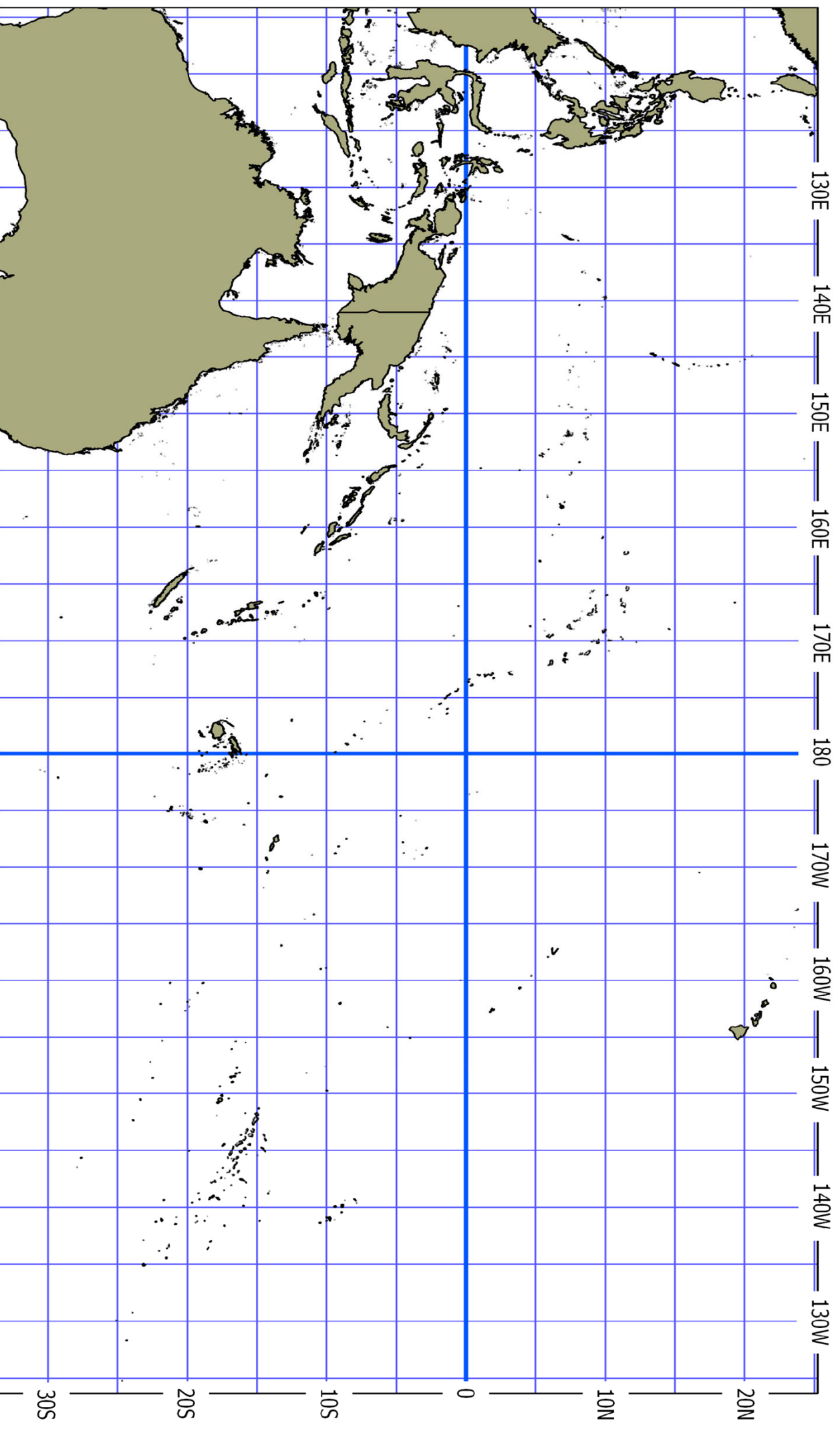
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FINDER NAME:	FINDER ADDRESS:
COUNTRY OF RECOVERY:	RECOVERY INFORMATION RECEIVED AT/ON (Cannery/Company/Agency name/vessel name):
TAG PROVIDED WITH THIS FORM:	<input type="checkbox"/> Yes <input type="checkbox"/> No (tag kept by finder IF NO, specify expected reward for reward purpose) location for finder (Port/Country):
TYPE OF REWARD:	<input type="checkbox"/> Not given <input type="checkbox"/> T-shirt <input type="checkbox"/> Cap <input type="checkbox"/> Cash - amount: _____ FORM COMPLETED BY:

COMMENTS: IF A TAGGED TURTLE / TAGGED BIRD WAS RELEASED ALIVE, DID YOU LEAVE THE TAGS ON ? Specify below.

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Website: www.spc.int/tagging

SINGLE TAG RECOVERY FORM

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CRITICAL TAG INFORMATION

TAG NUMBER:	DATE WHEN TAG FOUND:		
	YY	MM	DD

WHERE FOUND:	<input type="checkbox"/> Fishing vessel	<input type="checkbox"/> Reefer / Transfer / Carrier	<input type="checkbox"/> Port Fish market	<input type="checkbox"/> Cold storage
ACTIVITY WHEN FOUND:	<input type="checkbox"/> Fishing	<input type="checkbox"/> Well transfer	<input type="checkbox"/> Transshipment	<input type="checkbox"/> Unloading at port
				WELL NUMBER WHERE FISH FOUND: (If Applicable)

TAGGED SPECIES INFORMATION

SPECIES:		SPECIES RELIABILITY: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed	
LENGTH 1 : (cm)	LENGTH 2 : if applicable (cm)	NO length Information <input type="checkbox"/>	HOW MEASURED? <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated
		WHO MEASURED? <input type="checkbox"/> Port sampler <input type="checkbox"/> Observer <input type="checkbox"/> Other.... <i>Please specify:</i>	
Length 1 code:	Length 2 code:	PROCESSED STATE WHEN MEASURED: <input type="checkbox"/> Alive <input type="checkbox"/> Fresh and dead <input type="checkbox"/> Frozen <input type="checkbox"/> Frozen then thawed	
WEIGHT: (kg)	NO weight information <input type="checkbox"/>	HOW WEIGHED? <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated	
		PROCESSED STATE WHEN WEIGHED: <input type="checkbox"/> Whole weight <input type="checkbox"/> Gilled & gutted <input type="checkbox"/> Other.... <i>Please specify:</i>	

TAGGED SPECIES CATCH INFORMATION / Date and position when tagged species was caught by the fishing vessel

DATE	Exact <input type="checkbox"/>	YY	MM	DD	Estimated <input type="checkbox"/>	From	YY	MM	DD	to	YY	MM	DD
POSITION	Exact <input type="checkbox"/>	dd mm.mmm N / S			Estimated <input type="checkbox"/>	Record 2 lines of latitude and 2 of longitude to form area of catch (box) in which tag was likely recovered							
		Latitude				dd mm.mmm N / S			ddd mm.mmm E / W				
		Longitude				Latitude			Longitude				
		ddd mm.mmm E / W				Min			Max				
or DESCRIBE FISHING AREA (If NO Latitude and longitude provided above):													

FISHERY INFORMATION (Catcher / Fishing vessel that caught the tagged species)

VESSEL NAME:	FLAG:
FISHING METHOD:	<input type="checkbox"/> Longline <input type="checkbox"/> Purse seine <input type="checkbox"/> Troll <input type="checkbox"/> Handline <input type="checkbox"/> Gill net Other: _____
SCHOOL TYPE:	<input type="checkbox"/> Log <input type="checkbox"/> Free school <input type="checkbox"/> Anchored FAD <input type="checkbox"/> Drifting FAD FAD no: _____

TRANSSHIPMENT INFORMATION/ Carrier only (fill this section only if tagged species found during set share / transshipment / unloading)

NAME OF CARRIER:	FLAG:	DATE OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER:	YY	MM	DD	to	YY	MM	DD	
LOCATION OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER (EEZ/Port):		TRANSHIPMENT POSITION:	Latitude	dd	mm.mmm	N / S	Longitude	ddd	mm.mmm	E / W

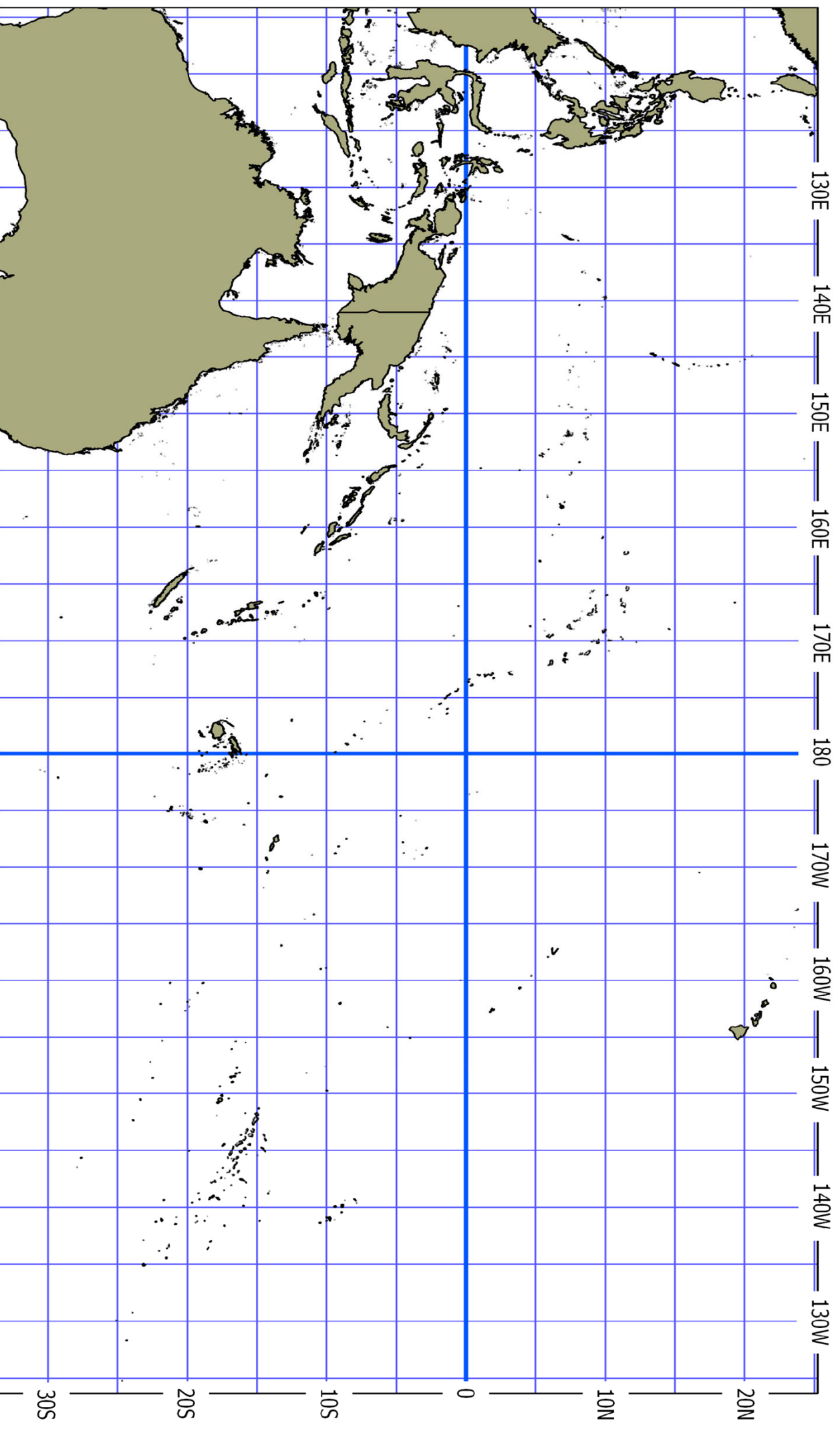
FINDER INFORMATION / finder details for lottery

FINDER NAME:	FINDER ADDRESS:
COUNTRY OF RECOVERY:	RECOVERY INFORMATION RECEIVED AT/ON (Cannery/Company/Agency name/vessel name):
TAG PROVIDED WITH THIS FORM:	<input type="checkbox"/> Yes <input type="checkbox"/> No (tag kept by finder IF NO, specify expected reward for reward purpose) location for finder (Port/Country):
TYPE OF REWARD:	<input type="checkbox"/> Not given <input type="checkbox"/> T-shirt <input type="checkbox"/> Cap <input type="checkbox"/> Cash - amount: _____ FORM COMPLETED BY:

COMMENTS: IF A TAGGED TURTLE / TAGGED BIRD WAS RELEASED ALIVE, DID YOU LEAVE THE TAGS ON ? Specify below.

ARCHIVAL TAG NUMBER (If applicable):

Type of tag	Reward
Yellow tag, Orange tag or Green tag	- 10\$ or Cap or T-shirt
Internal archival tag	- 250\$



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 latitude and longitude on the first page.

Email: tagging@spc.int
Website: www.spc.int/tagging

SPC MULTIPLE TAG RECOVERY FORM										PAGE OF	
MULTIPLE TAGGED FISH FOUND THE SAME DAY, COMING FROM THE SAME SET or THE SAME WELL											
REVISED SPC - Feb 2017											
<div>DATE WHEN TAG FOUND:<div><div>YY</div><div>MM</div><div>DD</div></div></div>										"When the tag is removed from the fish, be sure none of it remains inside the fish"	
WHERE FOUND:		<input type="checkbox"/> Fishing vessel		<input type="checkbox"/> Reefer / Transfer / Carrier		<input type="checkbox"/> Port Fish market		<input type="checkbox"/> Cold storage			
ACTIVITY WHEN FOUND:		<input type="checkbox"/> Fishing		<input type="checkbox"/> Well transfer		<input type="checkbox"/> Transhipment		<input type="checkbox"/> Unloading at port		WELL NUMBER WHERE FISH FOUND: (If Applicable)	
TAG NUMBER:		SPECIES: <input type="checkbox"/> SKJ <input type="checkbox"/> BET <input type="checkbox"/> YFT <input type="checkbox"/> Other <i>Please specify:</i>						FISH IDENTIFICATION: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed			
FORK LENGTH cm:		NO length Information <input type="checkbox"/>		HOW MEASURED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN MEASURED: <input type="checkbox"/> Fresh <input type="checkbox"/> Frozen		MEASURED BY: <input type="checkbox"/> Observer <input type="checkbox"/> Other			
FISH WEIGHT kg:		NO weight information <input type="checkbox"/>		HOW WEIGHED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN WEIGHED: <input type="checkbox"/> Whole weight <input type="checkbox"/> Gilled & gutted <input type="checkbox"/> Other					
TAG NUMBER:		SPECIES: <input type="checkbox"/> SKJ <input type="checkbox"/> BET <input type="checkbox"/> YFT <input type="checkbox"/> Other <i>Please specify:</i>						FISH IDENTIFICATION: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed			
FORK LENGTH cm:		NO length Information <input type="checkbox"/>		HOW MEASURED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN MEASURED: <input type="checkbox"/> Fresh <input type="checkbox"/> Frozen		MEASURED BY: <input type="checkbox"/> Observer <input type="checkbox"/> Other			
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TAG NUMBER:		SPECIES: <input type="checkbox"/> SKJ <input type="checkbox"/> BET <input type="checkbox"/> YFT <input type="checkbox"/> Other <i>Please specify:</i>						FISH IDENTIFICATION: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed			
FORK LENGTH cm:		NO length Information <input type="checkbox"/>		HOW MEASURED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN MEASURED: <input type="checkbox"/> Fresh <input type="checkbox"/> Frozen		MEASURED BY: <input type="checkbox"/> Observer <input type="checkbox"/> Other			
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TAG NUMBER:		SPECIES: <input type="checkbox"/> SKJ <input type="checkbox"/> BET <input type="checkbox"/> YFT <input type="checkbox"/> Other <i>Please specify:</i>						FISH IDENTIFICATION: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed			
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FISH WEIGHT kg:		NO weight information <input type="checkbox"/>		HOW WEIGHED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN WEIGHED: <input type="checkbox"/> Whole weight <input type="checkbox"/> Gilled & gutted <input type="checkbox"/> Other					
TAG NUMBER:		SPECIES: <input type="checkbox"/> SKJ <input type="checkbox"/> BET <input type="checkbox"/> YFT <input type="checkbox"/> Other <i>Please specify:</i>						FISH IDENTIFICATION: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed			
FORK LENGTH cm:		NO length Information <input type="checkbox"/>		HOW MEASURED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN MEASURED: <input type="checkbox"/> Fresh <input type="checkbox"/> Frozen		MEASURED BY: <input type="checkbox"/> Observer <input type="checkbox"/> Other			
FISH WEIGHT kg:		NO weight information <input type="checkbox"/>		HOW WEIGHED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN WEIGHED: <input type="checkbox"/> Whole weight <input type="checkbox"/> Gilled & gutted <input type="checkbox"/> Other					
TAG NUMBER:		SPECIES: <input type="checkbox"/> SKJ <input type="checkbox"/> BET <input type="checkbox"/> YFT <input type="checkbox"/> Other <i>Please specify:</i>						FISH IDENTIFICATION: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed			
FORK LENGTH cm:		NO length Information <input type="checkbox"/>		HOW MEASURED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN MEASURED: <input type="checkbox"/> Fresh <input type="checkbox"/> Frozen		MEASURED BY: <input type="checkbox"/> Observer <input type="checkbox"/> Other			
FISH WEIGHT kg:		NO weight information <input type="checkbox"/>		HOW WEIGHED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN WEIGHED: <input type="checkbox"/> Whole weight <input type="checkbox"/> Gilled & gutted <input type="checkbox"/> Other					
TAG NUMBER:		SPECIES: <input type="checkbox"/> SKJ <input type="checkbox"/> BET <input type="checkbox"/> YFT <input type="checkbox"/> Other <i>Please specify:</i>						FISH IDENTIFICATION: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed			
FORK LENGTH cm:		NO length Information <input type="checkbox"/>		HOW MEASURED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN MEASURED: <input type="checkbox"/> Fresh <input type="checkbox"/> Frozen		MEASURED BY: <input type="checkbox"/> Observer <input type="checkbox"/> Other			
FISH WEIGHT kg:		NO weight information <input type="checkbox"/>		HOW WEIGHED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN WEIGHED: <input type="checkbox"/> Whole weight <input type="checkbox"/> Gilled & gutted <input type="checkbox"/> Other					
TAG NUMBER:		SPECIES: <input type="checkbox"/> SKJ <input type="checkbox"/> BET <input type="checkbox"/> YFT <input type="checkbox"/> Other <i>Please specify:</i>						FISH IDENTIFICATION: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed			
FORK LENGTH cm:		NO length Information <input type="checkbox"/>		HOW MEASURED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN MEASURED: <input type="checkbox"/> Fresh <input type="checkbox"/> Frozen		MEASURED BY: <input type="checkbox"/> Observer <input type="checkbox"/> Other			
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TAG NUMBER:		SPECIES: <input type="checkbox"/> SKJ <input type="checkbox"/> BET <input type="checkbox"/> YFT <input type="checkbox"/> Other <i>Please specify:</i>						FISH IDENTIFICATION: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed			
FORK LENGTH cm:		NO length Information <input type="checkbox"/>		HOW MEASURED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN MEASURED: <input type="checkbox"/> Fresh <input type="checkbox"/> Frozen		MEASURED BY: <input type="checkbox"/> Observer <input type="checkbox"/> Other			
FISH WEIGHT kg:		NO weight information <input type="checkbox"/>		HOW WEIGHED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN WEIGHED: <input type="checkbox"/> Whole weight <input type="checkbox"/> Gilled & gutted <input type="checkbox"/> Other					
TAG NUMBER:		SPECIES: <input type="checkbox"/> SKJ <input type="checkbox"/> BET <input type="checkbox"/> YFT <input type="checkbox"/> Other <i>Please specify:</i>						FISH IDENTIFICATION: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed			
FORK LENGTH cm:		NO length Information <input type="checkbox"/>		HOW MEASURED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN MEASURED: <input type="checkbox"/> Fresh <input type="checkbox"/> Frozen		MEASURED BY: <input type="checkbox"/> Observer <input type="checkbox"/> Other			
FISH WEIGHT kg:		NO weight information <input type="checkbox"/>		HOW WEIGHED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN WEIGHED: <input type="checkbox"/> Whole weight <input type="checkbox"/> Gilled & gutted <input type="checkbox"/> Other					
TAG NUMBER:		SPECIES: <input type="checkbox"/> SKJ <input type="checkbox"/> BET <input type="checkbox"/> YFT <input type="checkbox"/> Other <i>Please specify:</i>						FISH IDENTIFICATION: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed			
FORK LENGTH cm:		NO length Information <input type="checkbox"/>		HOW MEASURED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN MEASURED: <input type="checkbox"/> Fresh <input type="checkbox"/> Frozen		MEASURED BY: <input type="checkbox"/> Observer <input type="checkbox"/> Other			
FISH WEIGHT kg:		NO weight information <input type="checkbox"/>		HOW WEIGHED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN WEIGHED: <input type="checkbox"/> Whole weight <input type="checkbox"/> Gilled & gutted <input type="checkbox"/> Other					

FISH CATCH INFORMATION / Date and position when fish was caught by the fishing vessel

DATE	Exact <input type="checkbox"/> <div>YY MM DD</div>	Estimated <input type="checkbox"/> <div>From <div>YY MM DD</div> to <div>YY MM DD</div></div>
POSITION	Exact <input type="checkbox"/> <div>dd mm.mmm N / S</div>	Estimated <input type="checkbox"/> <div>Record 2 lines of latitude and 2 of longitude to form area of catch (box) in which tag was likely recovered</div>
	<div>Latitude</div> <div>dd mm.mmm N / S</div>	<div>Latitude</div> <div>dd mm.mmm N / S</div>
	<div>Longitude</div> <div>ddd mm.mmm E / W</div>	<div>Longitude</div> <div>ddd mm.mmm E / W</div>
	<div>or DESCRIBE FISHING AREA (If NO Latitude and longitude provided above):</div>	

FISHERY INFORMATION (Catcher / Fishing vessel that caught the tagged fish)

VESSEL NAME:	FLAG:
FISHING METHOD: <input type="checkbox"/> Longline <input type="checkbox"/> Purse seine <input type="checkbox"/> Troll <input type="checkbox"/> Handline <input type="checkbox"/> Gill net Other: _____	
SCHOOL TYPE: <input type="checkbox"/> Log <input type="checkbox"/> Free school <input type="checkbox"/> Anchored FAD <input type="checkbox"/> Drifting FAD FAD no: _____	

TRANSSHIPMENT INFORMATION/ Carrier only (fill this section only if tags found during set share / transshipment /unloading)

NAME OF CARRIER:	FLAG:	DATE OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER: <div>YY MM DD</div> to <div>YY MM DD</div>
LOCATION OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER (EEZ/Port):	TRANSHIPMENT POSITION: <div>Latitude</div> <div>dd mm.mmm N / S</div>	<div>Longitude</div> <div>ddd mm.mmm E / W</div>

FINDER INFORMATION / finder details for lottery

FINDER NAME:	FINDER ADDRESS:
COUNTRY OF RECOVERY:	RECOVERY INFORMATION RECEIVED AT (Fishing Company/Agency name):
ALL TAGS PROVIDED WITH THIS FORM <input type="checkbox"/> Yes <input type="checkbox"/> No (tags kept by finder for reward purpose)	IF NO, specify expected reward location for finder (Port/Country):
TYPE OF REWARD <input type="checkbox"/> Not given <input type="checkbox"/> T-shirt <input type="checkbox"/> Cap <input type="checkbox"/> Cash - amount: _____	FORM COMPLETED BY:

Attach the tags here

ARCHIVAL TAG NUMBER (If applicable):

Type of tag	Reward
Yellow tag, Orange tag or Green tag	– 10\$ or Cap or T-shirt
Internal archival tag	– 250\$

SPC MULTIPLE TAG RECOVERY FORM										PAGE		OF							
MULTIPLE TAGGED FISH FOUND THE SAME DAY, COMING FROM THE SAME SET or THE SAME WELL																			
REVISED SPC - Feb 2017																			
DATE WHEN TAG FOUND: <table><tr><td>YY</td><td>MM</td><td>DD</td></tr><tr><td></td><td></td><td></td></tr></table>										YY	MM	DD				"When the tag is removed from the fish, be sure none of it remains inside the fish"			
YY	MM	DD																	
WHERE FOUND:		<input type="checkbox"/> Fishing vessel		<input type="checkbox"/> Reefer / Transfer / Carrier		<input type="checkbox"/> Port Fish market		<input type="checkbox"/> Cold storage											
ACTIVITY WHEN FOUND:		<input type="checkbox"/> Fishing		<input type="checkbox"/> Well transfer		<input type="checkbox"/> Transhipment		<input type="checkbox"/> Unloading at port		WELL NUMBER (If Applicable) WHERE FISH FOUND:									
TAG NUMBER:		SPECIES: <input type="checkbox"/> SKJ <input type="checkbox"/> BET <input type="checkbox"/> YFT <input type="checkbox"/> Other Please specify:						FISH IDENTIFICATION: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed											
FORK LENGTH cm:		NO length Information <input type="checkbox"/>		HOW MEASURED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN MEASURED: <input type="checkbox"/> Fresh <input type="checkbox"/> Frozen		MEASURED BY: <input type="checkbox"/> Observer <input type="checkbox"/> Other											
FISH WEIGHT kg:		NO weight information <input type="checkbox"/>		HOW WEIGHED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN WEIGHED: <input type="checkbox"/> Whole weight <input type="checkbox"/> Gilled & gutted <input type="checkbox"/> Other													
TAG NUMBER:		SPECIES: <input type="checkbox"/> SKJ <input type="checkbox"/> BET <input type="checkbox"/> YFT <input type="checkbox"/> Other Please specify:						FISH IDENTIFICATION: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed											
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TAG NUMBER:		SPECIES: <input type="checkbox"/> SKJ <input type="checkbox"/> BET <input type="checkbox"/> YFT <input type="checkbox"/> Other Please specify:						FISH IDENTIFICATION: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed											
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TAG NUMBER:		SPECIES: <input type="checkbox"/> SKJ <input type="checkbox"/> BET <input type="checkbox"/> YFT <input type="checkbox"/> Other Please specify:						FISH IDENTIFICATION: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed											
FORK LENGTH cm:		NO length Information <input type="checkbox"/>		HOW MEASURED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN MEASURED: <input type="checkbox"/> Fresh <input type="checkbox"/> Frozen		MEASURED BY: <input type="checkbox"/> Observer <input type="checkbox"/> Other											
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FORK LENGTH cm:		NO length Information <input type="checkbox"/>		HOW MEASURED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN MEASURED: <input type="checkbox"/> Fresh <input type="checkbox"/> Frozen		MEASURED BY: <input type="checkbox"/> Observer <input type="checkbox"/> Other											
FISH WEIGHT kg:		NO weight information <input type="checkbox"/>		HOW WEIGHED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN WEIGHED: <input type="checkbox"/> Whole weight <input type="checkbox"/> Gilled & gutted <input type="checkbox"/> Other													
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FORK LENGTH cm:		NO length Information <input type="checkbox"/>		HOW MEASURED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN MEASURED: <input type="checkbox"/> Fresh <input type="checkbox"/> Frozen		MEASURED BY: <input type="checkbox"/> Observer <input type="checkbox"/> Other											
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FISH WEIGHT kg:		NO weight information <input type="checkbox"/>		HOW WEIGHED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN WEIGHED: <input type="checkbox"/> Whole weight <input type="checkbox"/> Gilled & gutted <input type="checkbox"/> Other													

FISH CATCH INFORMATION / Date and position when fish was caught by the fishing vessel

DATE	Exact <input type="checkbox"/> <table border="1"> <tr> <td>YY</td> <td>MM</td> <td>DD</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	YY	MM	DD				Estimated <input type="checkbox"/> From <table border="1"> <tr> <td>YY</td> <td>MM</td> <td>DD</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table> to <table border="1"> <tr> <td>YY</td> <td>MM</td> <td>DD</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	YY	MM	DD				YY	MM	DD			
YY	MM	DD																		
YY	MM	DD																		
YY	MM	DD																		
POSITION	Exact <input type="checkbox"/> <table border="1"> <tr> <td>dd</td> <td>mm.mmm</td> <td>N / S</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	dd	mm.mmm	N / S				Estimated <input type="checkbox"/> Record 2 lines of latitude and 2 of longitude to form area of catch (box) in which tag was likely recovered												
	dd	mm.mmm	N / S																	
	Latitude <table border="1"> <tr> <td>°</td> <td>'</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	°	'					Latitude <table border="1"> <tr> <td>dd</td> <td>mm.mmm</td> <td>N / S</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	dd	mm.mmm	N / S				Longitude <table border="1"> <tr> <td>ddd</td> <td>mm.mmm</td> <td>E / W</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	ddd	mm.mmm	E / W		
°	'																			
dd	mm.mmm	N / S																		
ddd	mm.mmm	E / W																		
Longitude <table border="1"> <tr> <td>°</td> <td>'</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	°	'					Latitude <table border="1"> <tr> <td>Min</td> <td>°</td> <td>'</td> </tr> <tr> <td>Max</td> <td>°</td> <td>'</td> </tr> </table>	Min	°	'	Max	°	'	Longitude <table border="1"> <tr> <td>°</td> <td>'</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	°	'				
°	'																			
Min	°	'																		
Max	°	'																		
°	'																			
or DESCRIBE FISHING AREA (If NO Latitude and longitude provided above):																				

FISHERY INFORMATION (Catcher / Fishing vessel that caught the tagged fish)

VESSEL NAME:	FLAG:
FISHING METHOD: <input type="checkbox"/> Longline <input type="checkbox"/> Purse seine <input type="checkbox"/> Troll <input type="checkbox"/> Handline <input type="checkbox"/> Gill net Other: _____	
SCHOOL TYPE: <input type="checkbox"/> Log <input type="checkbox"/> Free school <input type="checkbox"/> Anchored FAD <input type="checkbox"/> Drifting FAD FAD no: _____	

TRANSSHIPMENT INFORMATION/ Carrier only (fill this section only if tags found during set share / transshipment /unloading)

NAME OF CARRIER:	FLAG:	DATE OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER: <table border="1"> <tr> <td>YY</td> <td>MM</td> <td>DD</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table> to <table border="1"> <tr> <td>YY</td> <td>MM</td> <td>DD</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	YY	MM	DD				YY	MM	DD							
YY	MM	DD																
YY	MM	DD																
LOCATION OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER (EEZ/Port):	TRANSHIPMENT POSITION: <table border="1"> <tr> <td>Latitude</td> <td>dd</td> <td>mm.mmm</td> <td>N / S</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Latitude	dd	mm.mmm	N / S					<table border="1"> <tr> <td>Longitude</td> <td>ddd</td> <td>mm.mmm</td> <td>E / W</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Longitude	ddd	mm.mmm	E / W				
Latitude	dd	mm.mmm	N / S															
Longitude	ddd	mm.mmm	E / W															

FINDER INFORMATION / finder details for lottery

FINDER NAME:	FINDER ADDRESS:
COUNTRY OF RECOVERY:	RECOVERY INFORMATION RECEIVED AT (Fishing Company/Agency name):
ALL TAGS PROVIDED WITH THIS FORM <input type="checkbox"/> Yes <input type="checkbox"/> No (tags kept by finder for reward purpose)	IF NO, specify expected reward location for finder (Port/Country):
TYPE OF REWARD <input type="checkbox"/> Not given <input type="checkbox"/> T-shirt <input type="checkbox"/> Cap <input type="checkbox"/> Cash - amount: _____	FORM COMPLETED BY:

Attach the tags here

ARCHIVAL TAG NUMBER (If applicable):

Type of tag	Reward
Yellow tag, Orange tag or Green tag	– 10\$ or Cap or T-shirt
Internal archival tag	– 250\$

SPC MULTIPLE TAG RECOVERY FORM										PAGE		OF							
MULTIPLE TAGGED FISH FOUND THE SAME DAY, COMING FROM THE SAME SET or THE SAME WELL																			
REVISED SPC - Feb 2017																			
DATE WHEN TAG FOUND: <table><tr><td>YY</td><td>MM</td><td>DD</td></tr><tr><td></td><td></td><td></td></tr></table>										YY	MM	DD				"When the tag is removed from the fish, be sure none of it remains inside the fish"			
YY	MM	DD																	
WHERE FOUND:		<input type="checkbox"/> Fishing vessel		<input type="checkbox"/> Reefer / Transfer / Carrier		<input type="checkbox"/> Port Fish market		<input type="checkbox"/> Cold storage											
ACTIVITY WHEN FOUND:		<input type="checkbox"/> Fishing		<input type="checkbox"/> Well transfer		<input type="checkbox"/> Transhipment		<input type="checkbox"/> Unloading at port		WELL NUMBER (If Applicable) WHERE FISH FOUND:									
TAG NUMBER:		SPECIES: <input type="checkbox"/> SKJ <input type="checkbox"/> BET <input type="checkbox"/> YFT <input type="checkbox"/> Other Please specify:						FISH IDENTIFICATION: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed											
FORK LENGTH cm:		NO length Information <input type="checkbox"/>		HOW MEASURED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN MEASURED: <input type="checkbox"/> Fresh <input type="checkbox"/> Frozen		MEASURED BY: <input type="checkbox"/> Observer <input type="checkbox"/> Other											
FISH WEIGHT kg:		NO weight information <input type="checkbox"/>		HOW WEIGHED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN WEIGHED: <input type="checkbox"/> Whole weight <input type="checkbox"/> Gilled & gutted <input type="checkbox"/> Other													
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FISH CATCH INFORMATION / Date and position when fish was caught by the fishing vessel

DATE	Exact <input type="checkbox"/> <table border="1"> <tr> <td>YY</td> <td>MM</td> <td>DD</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	YY	MM	DD				Estimated <input type="checkbox"/> From <table border="1"> <tr> <td>YY</td> <td>MM</td> <td>DD</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table> to <table border="1"> <tr> <td>YY</td> <td>MM</td> <td>DD</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	YY	MM	DD				YY	MM	DD			
YY	MM	DD																		
YY	MM	DD																		
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POSITION	Exact <input type="checkbox"/> <table border="1"> <tr> <td>dd</td> <td>mm.mmm</td> <td>N / S</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	dd	mm.mmm	N / S				Estimated <input type="checkbox"/> Record 2 lines of latitude and 2 of longitude to form area of catch (box) in which tag was likely recovered												
	dd	mm.mmm	N / S																	
	Latitude <table border="1"> <tr> <td>°</td> <td>'</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	°	'					Latitude <table border="1"> <tr> <td>dd</td> <td>mm.mmm</td> <td>N / S</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	dd	mm.mmm	N / S				Longitude <table border="1"> <tr> <td>ddd</td> <td>mm.mmm</td> <td>E / W</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	ddd	mm.mmm	E / W		
°	'																			
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Longitude <table border="1"> <tr> <td>°</td> <td>'</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	°	'					Latitude <table border="1"> <tr> <td>Min</td> <td>°</td> <td>'</td> </tr> <tr> <td>Max</td> <td>°</td> <td>'</td> </tr> </table>	Min	°	'	Max	°	'	Longitude <table border="1"> <tr> <td>°</td> <td>'</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	°	'				
°	'																			
Min	°	'																		
Max	°	'																		
°	'																			
or DESCRIBE FISHING AREA (If NO Latitude and longitude provided above):																				

FISHERY INFORMATION (Catcher / Fishing vessel that caught the tagged fish)

VESSEL NAME:	FLAG:
FISHING METHOD: <input type="checkbox"/> Longline <input type="checkbox"/> Purse seine <input type="checkbox"/> Troll <input type="checkbox"/> Handline <input type="checkbox"/> Gill net Other: _____	
SCHOOL TYPE: <input type="checkbox"/> Log <input type="checkbox"/> Free school <input type="checkbox"/> Anchored FAD <input type="checkbox"/> Drifting FAD FAD no: _____	

TRANSSHIPMENT INFORMATION/ Carrier only (fill this section only if tags found during set share / transshipment /unloading)

NAME OF CARRIER:	FLAG:	DATE OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER: <table border="1"> <tr> <td>YY</td> <td>MM</td> <td>DD</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table> to <table border="1"> <tr> <td>YY</td> <td>MM</td> <td>DD</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	YY	MM	DD				YY	MM	DD							
YY	MM	DD																
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LOCATION OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER (EEZ/Port):	TRANSHIPMENT POSITION: <table border="1"> <tr> <td>Latitude</td> <td>dd</td> <td>mm.mmm</td> <td>N / S</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Latitude	dd	mm.mmm	N / S					<table border="1"> <tr> <td>Longitude</td> <td>ddd</td> <td>mm.mmm</td> <td>E / W</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Longitude	ddd	mm.mmm	E / W				
Latitude	dd	mm.mmm	N / S															
Longitude	ddd	mm.mmm	E / W															

FINDER INFORMATION / finder details for lottery

FINDER NAME:	FINDER ADDRESS:
COUNTRY OF RECOVERY:	RECOVERY INFORMATION RECEIVED AT (Fishing Company/Agency name):
ALL TAGS PROVIDED WITH THIS FORM <input type="checkbox"/> Yes <input type="checkbox"/> No (tags kept by finder for reward purpose)	IF NO, specify expected reward location for finder (Port/Country):
TYPE OF REWARD <input type="checkbox"/> Not given <input type="checkbox"/> T-shirt <input type="checkbox"/> Cap <input type="checkbox"/> Cash - amount: _____	FORM COMPLETED BY:

Attach the tags here

ARCHIVAL TAG NUMBER (If applicable):

Type of tag	Reward
Yellow tag, Orange tag or Green tag	– 10\$ or Cap or T-shirt
Internal archival tag	– 250\$

SPC MULTIPLE TAG RECOVERY FORM										PAGE		OF							
MULTIPLE TAGGED FISH FOUND THE SAME DAY, COMING FROM THE SAME SET or THE SAME WELL																			
REVISED SPC - Feb 2017																			
DATE WHEN TAG FOUND: <table><tr><td>YY</td><td>MM</td><td>DD</td></tr><tr><td></td><td></td><td></td></tr></table>										YY	MM	DD				"When the tag is removed from the fish, be sure none of it remains inside the fish"			
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WHERE FOUND:		<input type="checkbox"/> Fishing vessel		<input type="checkbox"/> Reefer / Transfer / Carrier		<input type="checkbox"/> Port Fish market		<input type="checkbox"/> Cold storage											
ACTIVITY WHEN FOUND:		<input type="checkbox"/> Fishing		<input type="checkbox"/> Well transfer		<input type="checkbox"/> Transhipment		<input type="checkbox"/> Unloading at port		WELL NUMBER (If Applicable) WHERE FISH FOUND:									
TAG NUMBER:		SPECIES: <input type="checkbox"/> SKJ <input type="checkbox"/> BET <input type="checkbox"/> YFT <input type="checkbox"/> Other Please specify:						FISH IDENTIFICATION: <input type="checkbox"/> Confirmed <input type="checkbox"/> Guessed											
FORK LENGTH cm:		NO length Information <input type="checkbox"/>		HOW MEASURED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN MEASURED: <input type="checkbox"/> Fresh <input type="checkbox"/> Frozen		MEASURED BY: <input type="checkbox"/> Observer <input type="checkbox"/> Other											
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FISH WEIGHT kg:		NO weight information <input type="checkbox"/>		HOW WEIGHED: <input type="checkbox"/> Measuring tool <input type="checkbox"/> Estimated		STATE WHEN WEIGHED: <input type="checkbox"/> Whole weight <input type="checkbox"/> Gilled & gutted <input type="checkbox"/> Other													

FISH CATCH INFORMATION / Date and position when fish was caught by the fishing vessel

DATE	Exact <input type="checkbox"/> <table border="1"> <tr> <td>YY</td> <td>MM</td> <td>DD</td> </tr> </table>	YY	MM	DD	Estimated <input type="checkbox"/> From <table border="1"> <tr> <td>YY</td> <td>MM</td> <td>DD</td> </tr> </table> to <table border="1"> <tr> <td>YY</td> <td>MM</td> <td>DD</td> </tr> </table>	YY	MM	DD	YY	MM	DD
YY	MM	DD									
YY	MM	DD									
YY	MM	DD									
POSITION	Exact <input type="checkbox"/> <table border="1"> <tr> <td>dd</td> <td>mm.mmm</td> <td>N / S</td> </tr> </table>	dd	mm.mmm	N / S	Estimated <input type="checkbox"/> Record 2 lines of latitude and 2 of longitude to form area of catch (box) in which tag was likely recovered						
	dd	mm.mmm	N / S								
	Latitude <table border="1"> <tr> <td>°</td> <td>'</td> <td></td> </tr> </table>	°	'		Latitude <table border="1"> <tr> <td>dd</td> <td>mm.mmm</td> <td>N / S</td> </tr> </table>		dd	mm.mmm	N / S		
	°	'									
dd	mm.mmm	N / S									
Longitude <table border="1"> <tr> <td>°</td> <td>'</td> <td></td> </tr> </table>	°	'		Longitude <table border="1"> <tr> <td>ddd</td> <td>mm.mmm</td> <td>E / W</td> </tr> </table>		ddd	mm.mmm	E / W			
°	'										
ddd	mm.mmm	E / W									
or DESCRIBE FISHING AREA (If NO Latitude and longitude provided above):											

FISHERY INFORMATION (Catcher / Fishing vessel that caught the tagged fish)

VESSEL NAME:	FLAG:
FISHING METHOD: <input type="checkbox"/> Longline <input type="checkbox"/> Purse seine <input type="checkbox"/> Troll <input type="checkbox"/> Handline <input type="checkbox"/> Gill net Other: _____	
SCHOOL TYPE: <input type="checkbox"/> Log <input type="checkbox"/> Free school <input type="checkbox"/> Anchored FAD <input type="checkbox"/> Drifting FAD FAD no: _____	

TRANSSHIPMENT INFORMATION/ Carrier only (fill this section only if tags found during set share / transshipment /unloading)

NAME OF CARRIER:	FLAG:	DATE OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER: <table border="1"> <tr> <td>YY</td> <td>MM</td> <td>DD</td> </tr> </table> to <table border="1"> <tr> <td>YY</td> <td>MM</td> <td>DD</td> </tr> </table>	YY	MM	DD	YY	MM	DD									
YY	MM	DD															
YY	MM	DD															
LOCATION OF TRANSSHIPMENT FROM FISHING VESSEL TO CARRIER (EEZ/Port):	TRANSHIPMENT POSITION: <table border="1"> <tr> <td>Latitude</td> <td>dd</td> <td>mm.mmm</td> <td>N / S</td> </tr> <tr> <td></td> <td>°</td> <td>'</td> <td></td> </tr> </table> <table border="1"> <tr> <td>Longitude</td> <td>ddd</td> <td>mm.mmm</td> <td>E / W</td> </tr> <tr> <td></td> <td>°</td> <td>'</td> <td></td> </tr> </table>	Latitude	dd	mm.mmm	N / S		°	'		Longitude	ddd	mm.mmm	E / W		°	'	
Latitude	dd	mm.mmm	N / S														
	°	'															
Longitude	ddd	mm.mmm	E / W														
	°	'															

FINDER INFORMATION / finder details for lottery

FINDER NAME:	FINDER ADDRESS:
COUNTRY OF RECOVERY:	RECOVERY INFORMATION RECEIVED AT (Fishing Company/Agency name):
ALL TAGS PROVIDED WITH THIS FORM <input type="checkbox"/> Yes <input type="checkbox"/> No (tags kept by finder for reward purpose)	IF NO, specify expected reward location for finder (Port/Country):
TYPE OF REWARD <input type="checkbox"/> Not given <input type="checkbox"/> T-shirt <input type="checkbox"/> Cap <input type="checkbox"/> Cash - amount: _____	FORM COMPLETED BY:

Attach the tags here

ARCHIVAL TAG NUMBER (If applicable):

Type of tag	Reward
Yellow tag, Orange tag or Green tag	– 10\$ or Cap or T-shirt
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 (a rough guide for the open sea)

Beaufort 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)
3	Gentle breeze	Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses	7-10	0.6	
4	Moderate breeze	Small waves, becoming longer; fairly frequent white horses	11-16	1	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	
6	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	
8	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)
9	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	9	Time to be concerned ! Our condolences !
11	Violent storm	Exceptionally high waves (hiding small to medium ships)	56-63	11.5	
12	Hurricane	Air filled with foam and driving spray; visibility minimal	more than 64	14	