INTER-AMERICAN TROPICAL TUNA COMMISSION

94TH MEETING

Bilbao, Spain
22-26 July 2019

PROPOSAL IATTC-94 E-1A

SUBMITTED BY THE EUROPEAN UNION

IATTC RESOLUTION ON SCIENTIFIC OBSERVERS FOR LONGLINE VESSELS

EXPLANATORY MEMORANDUM

The revision of Resolution C-11-08 proposed by the EU intends to increase observer coverage on board longline vessels from the current 5% to 20%, as recommended by the Scientific Advisory Committee (SAC), over the next 5 years. The proposal also taps into the potential offered by electronic monitoring systems of observation (EMS) in order to complement human observation and envisages the future development of standards for electronic monitoring in IATTC. The proposal also reflects the current reporting requirements that have been established by the SAC under Resolution C-11-08 and consolidates them in a single Resolution. A decision should be made on whether to use Minimum Data Reporting Standards harmonised with WCPFC or use the ones developed by IATTC (Annex C).

(REPLACES C-11-08)

RESOLUTION ON SCIENTIFIC OBSERVERS FOR LONGLINE VESSELS

The Inter-American Tropical Tuna Commission (IATTC), gathered in Bilbao, Spain, on the occasion of its 94th Meeting;

Recognizing the need to collect scientific information on target species as well as comprehensive data on interactions with non-target species, in particular, sea turtles, sharks and seabirds;

Noting the need to ensure uniform and equitable treatment of all tuna-fishing vessels operating in the Convention Area;

Noting that all large purse-seine vessels operating in the Convention Area are required to carry scientific observers aboard, in accordance with the Agreement on the International Dolphin Conservation Program, and that the Commission has recommended the extension of observer coverage to smaller purse-seine vessels on a voluntary basis;

Taking into account that IATTC scientific staff and the IATTC Working Group on Bycatch have reiteratedly recommended at least 20% observer coverage on longline vessels fishing for tunas in the Convention Area, and that the Working Group on Bycatch suggested that human observer coverage could be supplemented by electronic monitoring systems (EMS) in order to achieve that goal; and

Noting that the Scientific Advisory Committee (SAC), at its 10th meeting in May 2019, determined that the appropriate measure of longline fishing effort for calculating observer coverage is "number of hooks."

Agrees that:

1. For the purposes of this Resolution, longline fishing effort is defined as the number of hooks deployed.
2. The main task of the scientific observers and/or EMS ~~systems~~ shall be to record, consistent with data

standards established by the SAC, any available biological information, the catches of targeted fish species, species composition, and any available biological information, as well as any interactions with non-target species such as sea turtles, seabirds and sharks.

3. Each Member and Cooperating Non-Member (CPCs) shall ensure that at least 5% of the fishing effort made by its longline fishing vessels greater than 20 meteres length overall carriesy a scientific observer.

4. Consistent with the recognition that observer coverage of at least 20% of longline fishing effort is needed- in particular in order to collect adequate information on bycatch and non-target species, CPCs shall increase their rate of observer coverage for all their longline vessels greater than 20 meters length overall, as well as those less than or equal to 20 meters length overall that operate on the high seas in the Convention Area, according to the following schedule:
   a. Coverage of a minimum of 10% of longline fishing effort by 1 January 2022.
   b. Coverage of a minimum of 15% of longline fishing effort by 1 January 2023.
   c. Coverage of a minimum of 20% of longline fishing effort by 1 January 2024.

5.4. Each CPC shall endeavor to ensure that observer coverage will beis representative of the activities of its fleet, including in terms of gear configuration, target species and areas fished.

6. Beginning in 2020, CPCs with qualifying longline vessels shall report to the SAC on their progress and future plans for meeting the observer coverage rates referred to in Paragraph 4, and shall continue to report in this manner until they achieve the 20% observer coverage target.

7. The SAC, at its 2025 meeting, shall evaluate the results of the target of 20% observer coverage of longline effort and assess if this rate is sufficient to fulfil the mandate of the Commission under the Antigua Convention.

8. CPCs may use a combination of human observers and EMS to achieve the coverage rates in Paragraph 4, provided that the baseline of 5% human observer coverage for longline vessels over 20 meters length overall specified in Paragraph 3 is met.

9.5. CPCs shall:
   a. Ensure that the minimum level of coverage is met;
   b. Take all necessary measures to ensure that observers are able to carry out their duties in a competent and safe manner;
   c. Endeavour to ensure that observers alternate vessels between their assignments;.
   d. Ensure that the vessel on which an observer is placed provide suitable food and lodging during the observer's deployment at the same level as the officers, where possible. Vessel masters shall ensure that all necessary cooperation is extended to observers in order for them to carry out their duties safely, including providing access, as required, to the retained catch, and catch which is intended to be discarded.

10.6. The reporting requirements established by the SAC can be found in Annexes A, B and C. The SAC may decide to modify these reporting requirements or establish new ones whenever deemed necessary and shall notify the Commission as appropriate.

11.7. CPCs shall submit operational data collected by human observers or EMS systems from the previous year, consistent with the Minimum Data Reporting Standards (Annex C), to the Director no later than June 30 of each year.

12.8. Unless otherwise specified by the SAC, CPCs shall submit other reporting under this Resolution by 31 March 31 of each year.

9. The IATTC scientific staff, ~~in consultation with CPCs and the Scientific Advisory Committee~~ shall prepare a draft proposal for the development of minimum standards for the implementation of an EMS for the longline fleets ~~to be adopted by the Commission by 2021 at the latest~~., taking into account the experience of CPCs that are implementing EMS on longline vessels and progress made in other tuna RFMOs, to be submitted to the SAC meeting of 2020. The proposal should, *inter alia*, consider the following elements:

    i. Objectives for EMS aboard longline vessels;
    ii. A timeline for developing data and operating standards for EMS;
    iii. Minimum standards for technology systems used for EMS, including, *inter alia,* camera system requirements, software and hardware, data storage[1] (including frequency of offload of video, data transmission via a hard drive or satellite, and video retention timeline once video is received for review by an EMS provider), and data protection;
    iv. Standards and frequency for transfer of data to the Secretariat;
    v. Data analysis standards, including practices for converting video imagery footage and sensor information into actionable data and standards for communicating results;
    vi. Any proposed activities (e.g., research projects, pilot studies), including a budget for any additional resources and a timeline, needed to develop the work;
    vii. The minimum acceptable software and hardware, and best practices in data storage, taking into account the unique environment on fishing vessels; safeguard standards to prevent alteration and manipulation of raw EMS footage.

10. The SAC, in consultation with the IATTC scientific staff, shall present recommendations on this proposal to the Commission for its consideration at its annual meeting in 2020.

11. The SAC shall, no later than at its 2021 meeting ~~session~~, adopt any modifications or additions to the Minimum Data Reporting Standards (Annex C) needs to accommodate observations by EMS.

Annex A: Annual Summary Reporting (established by SAC-10)

Annex B: Annual Metadata Reporting (established by SAC-07)

Annex C: Minimum Data Reporting Standards (2 options, established by SAC-08)

Option 1 (harmonized with WCPFC)

Option 2 (IATTC-developed ~~LL~~ longline observer forms)

[1] Special consideration should be made for amount of data storage needed and costs for long range trips, which can be significant

Annex A.

Template for annual summary reports on fleet information and observer data for longline vessels >20 m LOA operating in the EPO

(adopted by the 10th Meeting of the IATTC Scientific Advisory Committee, May 2019)

CPC	Name

FLEET INFORMATION (vessels >20 m LOA)									
	Both set types combined			Shallow sets (<15 HPB/HBF[1] or <100 m max hook depth)			Deep sets (≥15 HPB/HBF or ≥100 m max hook depth)		
Period covered	Date range DD-MMM-YY – DD-MMM-YY			Date range DD-MMM-YY – DD-MMM-YY			Date range DD-MMM-YY – DD-MMM-YY		
Area fished	from (XXX)°W to (XXX)°W and from (XX)°S/N to (XX)°S/N			from (XXX)°W to (XXX)°W and from (XX)°S/N to (XX)°S/N			from (XXX)°W to (XXX)°W and from (XX)°S/N to (XX)°S/N		
	Total Fleet	Observed	% observed	Total Fleet	Observed	% observed	Total Fleet	Observed	% observed
No. of vessels that fished									
No. of trips									
No. of effective days fishing									
No. of sets									
No. of hooks (in thousands) *(If unknown, approx. no. of hooks/set, using a *)*									
Predominant[2] hook type/size (IATTC code)									
Predominant bait type[3]									

[1] Hooks per basket / Hooks between floats
[2] 'Predominant' means most common, i.e., >50%
[3] Bait codes: SQ – squid; F – fishes (*e.g. Scomber* spp.); A – artificial lure (*e.g.* plastic jig)

NON-RETAINED SPECIES (vessels >20 m LOA)										
		No. of individuals observed								
		Both set types combined			Shallow sets (<15 HPB/HBF[1] or <100m max hook depth)			Deep sets (≥15 HPB/HBF or ≥100m max hook depth)		
		Released			Released			Released		
Species code	Species	Alive	Dead	Condition unknown	Alive	Dead	Condition unknown	Alive	Dead	Condition unknown
DKK	Leatherback (*Dermochelys coriacea*)									
TTL	Loggerhead (*Caretta caretta*)									
TUG	Green (*Chelonia mydas*)									
LKV	Olive ridley (*Lepidochelys olivacea*)									
	Add rows for additional species as required									
Sharks and rays										
FAL	Silky (*Carcharhinus falciformis*)									
OCS	Oceanic whitetip (*Carcharhinus longimanus*)									
BSH	Blue shark (*Prionace glauca*)									
SMA	Shortfin mako (*Isurus oxyrinchus*)									
SPL	Scalloped hammerhead (*Sphyrna lewini*)									
SPZ	Smooth hammerhead (*Sphyrna zygaena*)									
SPK	Great hammerhead (*Sphyrna mokarran*)									
RMB	Giant manta ray (*Manta birostris*)									
	Add rows for additional species as required									
Marine mammals										
FAW	False killer whale (*Pseudorca crassidens*)									
DRR	Risso's dolphin (*Grampus griseus*)									
SGF	Guadalupe fur seal (*Arctocephalus townsendi*)									
	Add rows for additional species as required									
Seabirds										
DQS	Antipodean albatross (*Diomedea antipodensis*)									
DPK	Waved albatross (*Phoebastria irrorata*)									
DIZ	Laysan albatross (*Phoebastria immutabilis*)									
DAQ	Short-tailed albatross (*Phoebastria albatrus*)									
	Add rows for additional species as required									
Billfishes										
MLS	Striped marlin (*Kajikia audax*)									
SSP	Shortbill spearfish (*Tetrapturus angustirostris*)									
BUM	Blue marlin (*Makaira nigricans*)									
	Add rows for additional species as required									

Annex B.

Report of the National Observer Programs for pelagic fisheries under the IATTC Convention Area

Observer Program	
Reporting CPC	Name of the program
Scientific contact	Email
Year start	Vessel type monitored
Average number of vessels observed per year	

Observer Program: Data recorded from interactions with fishing operations

Level data record:	Other:
Frequency record:	Other:

Data recorded please check if the following information is recorded	Target species	Non-target commercial spp	Other bycatch spp
Catches estimates (Kg/No)	◯	◯	◯
Dead discards	◯	◯	◯
Releases alive	◯	◯	◯
Species identification	◯	◯	◯

Main taxa groups monitor by observers	◯ Yes
Fish target spp	◯
All fish species (sharks/rays)	◯
Sea turtles	◯
Seabirds	◯
Mammals	◯
Other taxa (specify)	

Record on condition of discards and reasons for	◯ Yes
Reason(s) for discard of commercial catches	◯
General state of the discards	◯

Biological sampling and samples collections	Target spp	Non-target sp	Bycatch
Species identification (photo)	◯	◯	◯
Size and weight measurement	◯	◯	◯
Sex and/or fecundity status	◯	◯	◯
Hard parts (otoliths, spines)	◯	◯	◯
Tissues (muscle, gonads, blood)	◯	◯	◯
Tagging (release)	◯	◯	◯

Vessel information recorded	◯ Yes
ID, Name	◯
IMO Number	◯
LOA, GRT, HP	◯
Main gear(s) operation	◯
Electronics (GPS, sonar)	◯
Home port	◯

At fishing operation please check if the following information is recorded	◯ Yes	Start operation	End operation
Fishing on FADs or not	◯		
Gear type	◯		
Geo-position (lat - lon)	◯	◯	◯
Date/type operation	◯	◯	◯
Bait type	◯		
Crew number	◯		

Environmental data recorded	◯ Yes
Sea surface temperature	◯
At gear catch sea temperature	◯
Depth of gear operation	◯
Wind speed and direction	◯
Other environmental data	

Observer Program: Qualifications and training

Observer qualifications and training	Before enter observer program	Evaluation during program
Minimum qualifications describe		
Training course	◯	◯
Training materials and forms	◯	◯
Observer evaluation(s)	◯	◯
Validation of data recorded	◯	◯
On vessel training / experience	◯	◯

Annex C, Option 1.

Data field	Description/Instructions/Comments
Weather Facsimile	"Yes" if present, "No" if absent.
Sea Surface Temperature (SST) gauge	"Yes" if present, "No" if absent.
Sonar	"Yes" if present, "No" if absent.
Radio/ Satellite Buoys	"Yes" if present, "No" if absent.
Doppler Current Meter	"Yes" if present, "No" if absent.
Expendable Bathythermograph (XBT)	"Yes" if present, "No" if absent.
Satellite Communications Services (Phone/Fax/Email)	Indicate all the vessel Satellite numbers if the vessel has Satellite communications on board
Fishery information services	"Yes" if present, "No" if absent. Please also list the information service used.
Vessel Monitoring System	Indicate the type(s) of VMS used on the vessel (*e.g.* INMARSAT, ARGOS, etc.)
Refrigeration Method	List all refrigerator types used on the vessel.
GENERAL GEAR ATTRIBUTES	
Mainline material	List the of the mainline used by the vessel (*e.g.* Kuralon, Braided nylon, Monofilament Nylon, etc.).
Mainline length (specify unit)	The total length of the mainline when it is fully set
Mainline diameter (specify unit)	
Branch line material(s)	A branch line can consist of one type of material like monofilament or it can be made up of many different materials like braided nylon wire trace and mono filament, etc. If different types are used in different branch line positions, please describe.
SPECIAL GEAR ATTRIBUTES	
Wire trace	**At the trip level** indicate "Yes" or "No" -if the vessel uses wire traces on some or all of its lines. If wire traces used on all lines during the trip then record "ALL LINES." If the vessel used wire traces on certain branch line positions during the trip, describe the configuration. For example, "wire traces were used on first and tenth branch lines of each basket". If the proportion of leaders that are wire varies within a trip, record the average based on a sample of ten total baskets from a range of sets.
Mainline hauler	Does the vessel use an instrument to haul in the main line after it is set or is the line hauled by hand?
Branch line hauler	Does the vessel use a special hauler to coil branch lines?
Line shooter	Does the vessel use a line shooter?
Automatic bait thrower	Does the vessel use a bait thrower or are bait and branch lines thrown overboard manually?
Automatic branch line attached	Does the vessel have an automatic branch line mechanism that attaches the branch at regular intervals or is this done manually?
Hook type	For each set, record the type of hook or hooks used, using the codes in the hook catalogue (*e.g.* J hooks, circle hooks, offset circle hooks, etc.)
Hook size	For each set, record the size of the hooks used. If not sure, ask the bosun or refer to a hook catalogue.
Tori Lines	For each set, record whether the vessel uses Tori lines when setting; if yes, how many and their length.
side setting with bird curtain and weighted branch lines	For each set, record whether the vessel used side-setting with a bird curtain in combination with weighted branch lines.

Data field	Description/Instructions/Comments
Weighted branch lines-	For each trip where weighted branch lines are used, record the mass of the weight attached to the branch line. If more than one type of weighting is used during a trip, describe each type and indicate the proportion based on a sample of ten baskets from a range of different sets.
Shark lines	For each set, record the number of shark lines (branch lines running directly off the longline floats or drop lines) observed. Where possible, record the length of this line for each set.
Blue dyed bait	For each set, record whether the vessel used blue-dyed bait.
Distance between weight and hook (in meters)	For each set, record the distance in meters from where the bottom of the weight is attached on the branch line to the eye of the hook.
Deep setting line shooter	For each set, record whether the vessel used a deep setting line shooter.
Management of offal discharge	For each set, record whether the vessel used the management of offal discharge.
Date and time of start of set	For each set, record the date and time the first buoy is thrown into the water to start the setting of the line.
Latitude and Longitude of start of set	For each set, record the GPS reading at the time the first buoy is thrown into the water
Date and Time of end of set	For each set, record the date and time the last buoy (usually has radio beacon attached) at the end of the mainline is thrown into the water
Latitude and Longitude of end of set	For each set, record the GPS reading at the time the last buoy is thrown into the water
Total number of baskets or floats	For each set, record the number of baskets utilized. A basket is the sum of all the hooks set between two buoys on a longline; usually it is the same as the number of floats set minus one.
Number of hooks per basket (number of hooks between buoys)	For each set, record how many hooks set from one buoy to another, the number is usually constant along the line, but can vary in some cases, also if the vessel also sets a branch line on the buoy, count this as a hook between floats as well.
Total number of hooks used	For each set, record how many hooks were used. This is typically calculated by multiplying number of baskets by the number of hooks per basket.
Line shooter speed	For each set where the vessel uses a line shooter, record the shooter speed. The shooter will normally have an indicator to show its running speed, as well as a sound indicator or light, that beeps at a regular interval, when it is time to attach a branch line.
Length of float-line	For each trip, record length of the line that is attached to the floats, get a coil and measure the length. It usually remains the same throughout the trip.
Distance between branch-lines	For each set, record the distance between branch line attachments to the mainline. This can be determined easily if vessel has a line shooter with electronic attachment indicator.
Length of branch-lines	For each set, measure the length of a sample of the majority of branch lines used, some may vary slightly due to repairs.
Time-depth recorders (TDRs)	Does the vessel use TDRs on its line? If yes record the number of TDRs used it may use and their location along the mainline.?
Number of light-sticks	or each set, indicate whether the vessel uses light sticks on its line, record the number used, and where possible, information on the

Data field	Description/Instructions/Comments
	location (*e.g.* "used on first and tenth branch lines from the float").
Target species	What species does the vessel target? Tuna (BET YFT), Swordfish, Sharks, etc.
Bait Species	For each set, record the bait species used Pilchard, Sardine, Squid, artificial bait, etc.
Date and time of start of haul	For each set, record the date and time the first buoy of the mainline is hauled from the water to start the haul.
Date and time of end of haul	For each set, record the date and time the last buoy of the mainline is hauled from the water to end the haul.
Total number of baskets, floats monitored by observer in a single set	For each set, record how many floats or baskets were monitored by the observer?
INFORMATION ON CATCH FOR EACH SET	
Hook number (location between floats)	For each individual capture, record the hook number that the animal is caught on, counting from the last float hauled on board.
Species	Use FAO species code.
Length of fish	Measure length of specimen, using the recommended measurement approach for the species.
Length measurement code	Reflect the type of length measurement taken using the appropriate measurement code. For example, all tunas are measured from the end of the upper Jaw to fork of the tail, measurement code UF.
Sex	Sex the species if possible. If an unsuccessful attempt is made to sex the individual, record "I" for indeterminate. If no attempt to sex the individual is made, record "U" for unknown.
Condition when caught	For bycatch species (*e.g.* sharks, sea turtles, seabird, marine mammals, etc.) also reflect hooking location [*i.e.* hooked in mouth, hooked deeply (throat/ stomach), and hooked externally].
Fate	Record the ultimate disposition of the capture using the appropriate code (*e.g.* retained, discarded, etc.)
Condition when released	If released, record the animal's status when returned to the sea.
Tag recovery information	Record as much as information as possible on any tags recovered
SPECIES OF SPECIAL INTEREST **Sea turtles, marine mammals, sea birds, and sharks**	
GENERAL INFORMATION	
Type of interaction	Indicate the type of interaction (*e.g.* entangled, hooked internally, hooked externally, interaction with vessel only, etc.).
Date and time of interaction	Record ships date and time of interaction
Latitude and longitude of interaction	Record position of the interaction.
Species code of sea turtle, marine mammal, or seabird.	Use FAO codes for Species.
LANDED ON DECK	
Length	Measure length, in centimeters.
Length measurement code	Measure using the measure method determined for that species.
Sex	Sex the animal if possible.
Estimated fin weight (for sharks)	Weigh the fins separately if shark has been finned by crew. If no scales, estimate the weight.
Estimated carcass weight (for sharks)	Weigh the carcass of a finned shark. If no scales available, carcass is discarded, or if it is too large to handle, estimate the weight.
Condition when landed on Deck	Record the animal's condition when landed on deck, using

Data field	Description/Instructions/Comments
	appropriate code.
Condition when released	If released, record the animal's condition at the time of release, using appropriate code.
Tag recovery information	Record as much as information as possible on any tags recovered
Tag release information	Record as much as information as possible on any tags placed on the species before release.

Annex C, Option 2.

LONGLINE GEAR FORM

F2

VESSEL: _____ SAMPLE No:_____ OBSERVER: _____

Registration		Length	m	Fuel capacity	gal	Number of crew	
Company name		Width	m	Fuel used	gal	Water capacity	gal
Captain Name		Draft	m	Type of fuel		Catch conserve method	
Departure date/time		Distance deck to water	m	Type (fibra-mother ship)		If the vessel is a 'fibra', ↓ name of mother ship ↓	
Arrival date/time		Well capacity	MT	Number of fibras			
Departure port		Main motor		Navigation and fishing equipment:			
Arrival port		Aux. motor					

Characteristics	Quantity	Material *	Diameter	Length	Color *
Mainline			mm	Nm	
Upper gangion			mm	fath	
Middle gangion			mm	fath	
Lower gangion			mm	fath	
Floatline / dropline				cm	
Buoy			cm		
Flag					
Float			cm		

Distance btwn. hooks↓	Max. hooks on mainline↓	Number of lights↓	Number of radio buoys↓
bz			

Mainline weights: Yes ( ) No ( )

Dropline connection to mainline: Knots ( ) Snaps ( )

Mainline retrieval
By hand ( )
Manual crank ( )
Hydraulic crank ( )
Other _____ ( )

Fishing gear diagram

Hooks	Type (J / C)	Size	J-straight/ J-curved	Material*	Manufac-turer	Offset	Ring (Yes / No)	Other details	Observations
Hook A									
Hook B									
Hook ©									

* Use numbers from code tables

F2s v2: 02/2012

LONGLINE SET FORM

F3

VESSEL: ______________________ SAMPLE No: _____ OBSERVER: ______________________

Set number		SET		RETRIEVAL		Number of hooks in the set by type:	Hook. A	Hook. B	Hook. ©		Type of bait	% of total
		Start	End	Start	End							
↓ Date ↓	LAT									Bait 1		
	LON					Total no. of hooks in set:				Bait 2		
	TIME					No. of hooks lost:				Bait 3		
Target Fishery	Set Special? Yes ☐ Patrolled? ☐		Retrieval direction Start to end ☐ End to start ☐		Sea surf. temp.	No. hooks btwn. floats	Avg. hook depth fath	Bottom longline? Yes ☐ No ☐				
Observations:												

Set number		SET		RETRIEVAL		Number of hooks in the set by type:	Hook. A	Hook. B	Hook. ©		Type of bait	% of total
		Start	End	Start	End							
↓ Date ↓	LAT									Bait 1		
	LON					Total no. of hooks in set:				Bait 2		
	TIME					No. of hooks lost:				Bait 3		
Target Fishery	Set Special? Yes ☐ Patrolled? ☐		Retrieval direction Start to end ☐ End to start ☐		Sea surf. temp.	No. hooks btwn. floats	Avg. hook depth fath	Bottom longline? Yes ☐ No ☐				
Observations:												

Set number		SET		RETRIEVAL		Number of hooks in the set by type:	Hook. A	Hook. B	Hook. ©		Type of bait	% of total
		Start	End	Start	End							
↓ Date ↓	LAT									Bait 1		
	LON					Total no. of hooks in set:				Bait 2		
	TIME					No. of hooks lost:				Bait 3		
Target Fishery	Set Special? Yes ☐ Patrolled? ☐		Retrieval direction Start to end ☐ End to start ☐		Sea surf. temp.	No. hooks btwn. floats	Avg. hook depth fath	Bottom longline? Yes ☐ No ☐				
Observations:												

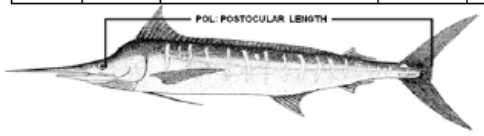
F3s v1: 02/2012

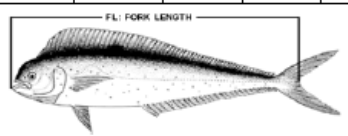
CATCH FORM

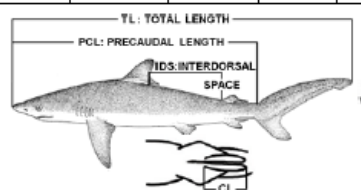
F4

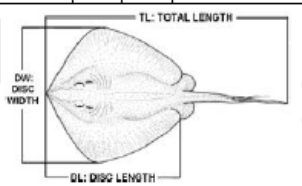
VESSEL: _____ SAMPLE No: _____ OBSERVER:_____

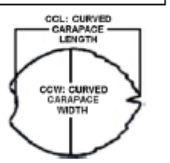
Set No.	Time	Species name	Number caught	Hook A B C	Hook location *	Dispo-sition *	Sex M=1 F=2	Weight (kg)	LENGTHS (cm)			Male sharks			Observations
									POL-FL-TL-CCL	PCL-*DL*	IDS-*DW*-CCW	CL (cm)	CAL	SEMEN	











* Use numbers from code tables

F4s v1: 02/2012

F5

TURTLE FORM

(Record turtle sightings only for hawksbill, loggerhead and leatherback turtles)

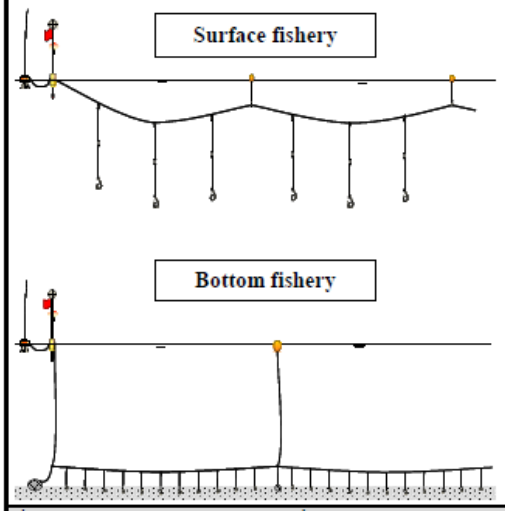
VESSEL: _____ **SAMPLE No:** _____ **OBSERVER:** _____

Date	Time	Set number	Species	Sex	CCL[1] (cm)	CCW[2] (cm)	Tail LTC (cm)	Hook A B C	Color of the nearest float or buoy*

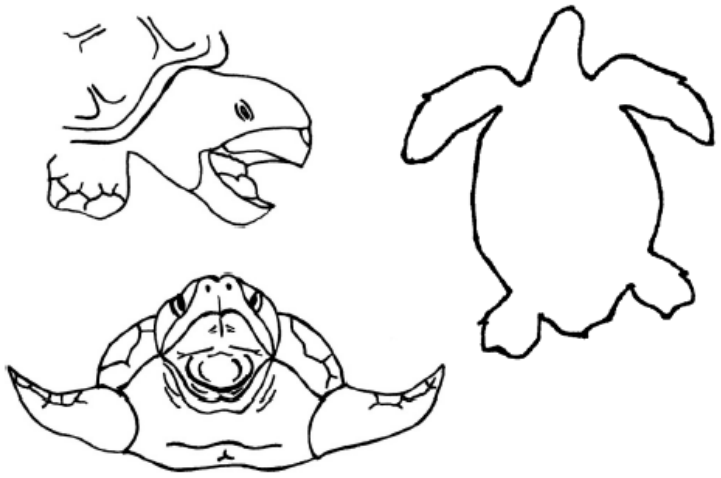
Position:	Latitude		Longitude	

Condition *( )	Entanglement *( )	Hooking *( )	Disposition*( )	Observations:

Turtle location in relation to the fishing gear



Hook location and turtle entanglement

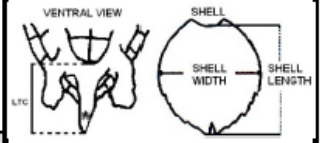


Existing tag 1:

Existing tag 2:

New tag 1:

New tag 2:



[1]CCL: Curved carapace length [2]CCW: Curved carapace width

* Use numbers from code tables

F5s v1: 02/2012

BIRD FORM

F6

VESSEL: _____ SAMPLE No: _____ OBSERVER: _____

Set No.	Date	Time	Species name	Position		Age Immature=1 Adult=2	Sex M=1 F=2	Caught in set Yes/No	Hook A B C	Cond-ition *	Mitig. 1 *	Mitig. 2 *	Dispo-sition *	Photo Yes/No	Observations
				Latitude	Longitude										

* Use numbers from code tables

F6s v1: 07/2014