

IOTC Regional Observer Scheme



OBSERVER TRIP REPORT

Observer name :

Nationality :

IOTC Certification No. :

Vessel name :

IOTC Registration No. :

Vessel type :

Trip started :

Trip ended :

I. Trip summary

A brief outline of the work carried out, including any specific tasks undertaken that are additional to those specific in the IOTC Scientific Observer Manual. It should include a brief summary from each section or highlights points that the observer would like the reader to take special note of.

Operational issue:

(problem that could have been faced by the observer during his deployment)

Observer tasks:

Observer logbooks/forms

II. Scientific Observer and vessel details

A. Scientific Observer Details

Observer name:	Nationality:
Controlling organization:	Contact address:

BOARDING		DISEMBARKATION	
Date (dd/mm/yy)	Time (GMT)	Date (dd/mm/yy)	Time (GMT)
Location		Location	

Comments

B. Vessel details

Vessel name		Radio CallSign	Flag State	Port of registration
Vessel type	Main fishing gear	Owner		Charterer
Gross tonnage	Length Over All (m)	Blast freezer capacity (m ³)	Fish Storage capacity (m ³)	

ELECTRONIC EQUIPMENT

Record details such as "make, model and power" of the electronic equipment used on the bridge for navigation, communication and general fishing operation. Also note the average "usage code" of the equipment during the trip.

Onboard acoustic equipment

Position fixing equipment
Vessel Monitoring System PRESENT / ABSENT VMS unit and transmitter equipment type
Radars
Communication equipment
Plotters

Comments <i>Comments on any unique equipment that may have had a significant effect on fishing operations</i>

III. Cruise Itinerary

Date of departure (dd/mm/yyyy) / /	Port / Position of departure		
Arrival on fishing ground (dd/mm/yyyy) / /	Start fishing (dd/mm/yyyy) / /	End fishing (dd/mm/yyyy) / /	Departure of fishing grounds (dd/mm/yyyy) / /
Date of return (dd/mm/yyyy) / /	Port / Position of return		

Comments

IV. Fishing Operations

C. Summary

Total number of days in the fishing area Days	Total number of days fished Days	Days lost (weather, breakdown...) Days	Steaming / Searching days Days
Target species	Total number of sets/drifts	Number of hooks / panels	Number of hooks / panels lost
Total number of sets / drifts observed / sampled		Number of hooks / panels observed / sampled	
Bait used (type / species)		Bait ratio	
1/		1/ %	
2/		2/ %	
3/		3/ %	
Comments			

D. Gear Description

Longline

Longline type(s) used <i>(IOTC gear code)</i>	Line Setter Y / N	Bait casting machine Y / N	Line Hauler Y / N
	Make	Make	Make
	Model	Model	Model

Mainline	Branch line storage (basket / tub / reel)	No. Hooks per basket / tub / Hooks reel	
Material		Type(s)	
Length (m) onboard		Size(s)	
Diameter (mm)			
Branch line 1	Branch line 2	Branch line 3	Branch line 4
Material (s)	Material (s)	Material (s)	Material (s)
Diameter (mm)	Diameter (mm)	Diameter (mm)	Diameter (mm)
Leader 1	Leader 2	Leader 3	Leader 4
Material	Material	Material	Material
Diameter (mm)	Diameter (mm)	Diameter (mm)	Diameter (mm)
Refrigeration method		Fish storage method	
Comments <i>Comment on the set-up and use of the gear. Note differences in branch lines construction.</i>			

Purse-seine

Max. Net length (m)	Max. Net depth (m)	Power Block Make Model	No. of Buoys per type at embarkation At sea
Stretched mesh size (mm)	Supply Vessel(s) Y / N Name(s)	Purse Winch Make Model	Onboard

Comments

Pole and Line

Maximum No. of operational poles	Total volume of bait tanks (m³)	Automatic poling Y / N
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Comments

Gillnet / Trammel nets

Total No. of Net Panels onboard	Total Length of Net panels (m)	Stretched mesh size(s) (mm)	Hanging ratio
Max. Deployable Net Length / Day (m)	Net Anchored Drifting	Nets set on Surface Sub-surface Bottom	Net drum / hauler Y / N Make Model

Comments <i>Record strategy of setting nets, and whether they actively encircle fish. Note if nets are set on surface or sub-surface and are anchored or drifting.</i>
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E. Retained Catch Details (all species) per calendar months

Year	Month	Species	Square number (1°x1°)	Processing code	Processed weight (kg)

Comments

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F. Processing Details

Species	Processing Code	Comments

<p>Comments</p>

G. Fish discards

Year	Month	Species	Square number (1°x1°)	Number or Weight (kg)	Reason

<p>Comments</p>

V. Summary of meteorological details

Briefly describe the predominant weather and sea conditions during the trip. Note specifically adverse conditions that affected the fishing operations.

VI. Summary of fishing strategy

Provide a brief description of the fishing methods and strategy. Include a description of the use of FADs and the use of electronic aids to locate or determine areas fished.

VII. Summary of incidental catches

A. Mitigation Measures

Did the vessel operate south of 25°S?

Y / N

List of mitigation measures used

1/

2/

3/

...

If Tori lines were used:

What was the number of sets where the Tori lines were deployed?

What was the percentage of sets which Tori lines were deployed?

Were the Tori lines constructed according to the guidelines recommended by IOTC?

%

Comments

Comment of the construction, streamer length and material, aerial extent and effectiveness of the tori lines

B. Seabirds caught

Year	Month	Species	Square number (1°x1°)	Fate	Comments
				Dead: Released alive:	
				Dead: Released alive:	
				Dead: Released alive:	
				Dead: Released alive:	

C. Marine Mammals caught

Year	Month	Species	Square number (1°x1°)	Fate	Comments
				Dead: Released alive:	
				Dead: Released alive:	
				Dead: Released alive:	

D. Sea turtles caught

Year	Month	Species	Square number (1°x1°)	Fate	Comments
				Dead: Released alive:	
				Dead: Released alive:	
				Dead: Released alive:	
				Dead: Released alive:	
				Dead: Released alive:	

E. Depredation

Number of sets with observed depredation

Percentage of sets with observed depredation

Percentage of catch per species damaged by depredation

Was fish loss attributed to predator but not directly observed?

%
%
Y / N

List of predator species observed

1/
2/
3/
...

Comments

F. Tag Recovery information

Tag No.	Species	Length (cm)	Length type	Weight (kg)	Weight type	Position of recovery	Finder details	Comments (eg. Full label on tag, tag type)
						Lat: N / S Long: E		
						Lat: N / S Long: E		
						Lat: N / S Long: E		
						Lat: N / S Long: E		

VIII. Summary of biological data collected

A. Biological Data Collection summary

Species	Total No. individuals sampled	No measured	No weighted	No. Sexed	Maturity stage recorded	Otoliths collected	Other (specify)	Carcass retained

Guide to writing the Observer Trip Report

The main purpose of a scientific report is to synthesise and communicate on the information that was collected. Good report writing skills are part of effective communication. Such report, unlike verbal communication, is a lasting document, which can be referred to in the future. When writing a report it can be assumed that your intended reader has a general understanding of the topic but no specific knowledge of the details.

The specific purpose of the “Observer Trip Report” is to provide a comprehensive summary of observations and sampling undertaken during an observer trip. Tables capture data on specific items such as gear, catch and number of sampled fish, *etc...* However the observer is also expected to provide comment on the data recorded that includes information that is not routinely captured by data forms or the tables in the report. Specific items of information reported on during the trip should also be highlighted to draw attention to these when the data is analysed.

General style

- Strive for logic and precision and avoid ambiguity, especially with pronouns and sequences
- **ONLY** use the International Metric System of measurement and abbreviate measurements without periods (*i.e.* cm and kg)

	International Metric System	
Length	millimetre (mm)	centimetre (cm) metre (m)
Area	square metre (m ²)	
Volume	litre (l) cubic metre (m ³)	
Weight	gramme (g)	kilogramme (kg) ton (t)

- Spell out all numbers beginning sentences or less than 10 (*i.e.* "two explanations of six factors").
- Write numbers as numerals when greater than ten (*i.e.* 156) or associated with measurements (*i.e.* 6 mm or 2 g)
- Within the report, the exact format of particular items is less important than consistency of application. For example, if you indent paragraphs, be sure to indent them all; use a consistent style of headings throughout (*e.g.* major headings in bold with initial capitals, minor headings in italics, *etc.*); write "%" or "percent" but do not mix them, and so on. In other words, establish a template and stick to it.
- Have a neutral person review and critique your report before submission.
- Make a list of the acronyms used in the report and their definition/meaning

I. Trip Summary

The trip summary should give a concise and clear summary of the report. **Write this section of the report last, once the other sections have been completed.** It should not be longer than a single page and should provide the reader with the most important information for a particular cruise. Follow the headings of the report when writing the trip summary and use the following guidelines:

- The 1st paragraph should give details on the vessel, the flag state, the name of the observer(s), his/her nationality, the target species, the areas fished and the period(s) when fishing occurred.
- The 2nd paragraph should give a short summary of the cruise itinerary (dates and ports of departure and return *etc.*)
- The 3rd paragraph should give a short summary of fishing operations – the number of days fished & days lost, the number of sets/trawls, the number of hooks/pots set, the fishing depth, bait types used and the number of hooks/hauls observed.

- The 4th paragraph should give details on catches (weights and products). Mention the catch by weight and number of the target species and some details on by-catches. Mention the conversion factors (observer and vessel).
- The 5th paragraph should give a short summary of biological sampling done by the observer (e.g. length, weight, maturity, otoliths, tagging etc.)
- The 6th paragraph should give details on bird and turtles mortalities, entanglements, mitigation measures, marine mammal entanglements and interactions *etc.*
- The 7th paragraph should mention any vessel sightings (important for IUU vessels) and difficulties encountered (with operational issues and observer tasks.)
- Keep your writing impersonal, in the third person and avoid the use of the first person (*i.e.* I or we).
- Use the past tense and be consistent within the report - do not change between past and present tense.

II. Guide to some specific formats in Observer Reports

1. Date format:

Only use the following format: dd/mm/yyyy (*eg.* 25/12/2010 for the 25th December 2010)

2. Species names:

As much as possible, species CODE should be used to fill the table, but using species codes in the text of the report should be avoided and instead species names should be used. If there is no code for a particular species, the whole latin species name should be used. If the species cannot be identified, an Id picture should be taken and common name could be used.

The Latin names for individual species are written using a system termed "binomial nomenclature". Each species is identified by a combination of "two names": its *genus name* and its *specific epithet*. A familiar example is that of human beings, *Homo sapiens*.

III. Simple Rules for Writing Latin Names in Papers

- The first time a species is mentioned in the title and in the text it should be written out in full, *e.g.* *Thunnus albacares*.
- The genus name (1st of the two names) should always start with a capital letter.
- The specific epithet (2nd of the two names) should always be with a small letter.
- The species names should always be in *italics*.
- Avoid using species codes in the text of the report instead of species names or common names.
- After the species name has been written out in full the first time, it must be abbreviated as follow: *T. albacares*, *i.e.* the genus has been abbreviated to the first letter and a full stop.
- Always write the species name after the common name when mentioning a fish, bird or mammal for the 1st time, *e.g.*....wandering albatross, *Diomedea exulans*, were observed...
- If you need to mention the species name many times in your report you may find it better to use the common name.
- Common names should be written in small letters, *e.g.* giant petrels and not Giant Petrels.

3. Reporting on one degree (1°) Grid area

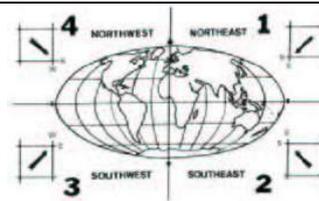
The corner of the 1° square closest to 0° Latitude, (equator) and 0° Longitude, (Greenwich meridian) is recorded as:

Latitude: Indicate by (two digits)

Longitude: Indicate by (three digits)

Preceded by the geographical quadrant.

Record the Major geographic quadrants divided by the Equator (latitude 0°) and the Greenwich meridian (longitude 0°), as follows:

<p>1: for Northeast 2: for Southeast 3: for Southwest 4: for Northwest</p>	
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In the Indian Ocean, only 1 and 2 will apply.

For example:

The 1° grid covering an area from 04° S to 05° S Latitude and 067° E to 068° E Longitude would be recorded in the report tables as "2 04 067" or "204067".

Grid Size	Quadrant	Degrees Latitude	Degrees Longitude
1	2	04	067

4. Formatting of text

Body text should use the following font: Times New Roman, regular, size 11

Paragraphs should be aligned to the left and line spacing should be single.

Observer's Deployment Report

(To be submitted within 24-hours of the vessels departure from port)

Date		
Observer		
Vessel Name / Call sign		
Company		
Captain / Fishing Master		
Vessel Contact Details	Number	
	Email	

Deployment Details	
Briefing Date	
Contract "Start Date"	
Flight No.s <i>(Observers must retain their flight boarding passes)</i>	
Departure date from	
Departure time from	
Landing date at destination	
Landing time at destination	
Safety Inspection completed (yes /no)	
Boarding date	
Sailing Date	
Sailing Time	
Port of departure	
Comment	

Observer Five-Day Status Report Format

Vessel Name / Call sign	
Observer	
Date / Report Period	
Location at time of report	

No. sets sampled in period	
Number and / or weight per species retained or discarded <i>(Increase number rows as required)</i>	
Species	Retained
	Released
Number and / or weight per species sampled <i>(Increase number rows as required)</i>	
Species	Retained
	Released
Streamer Line measured	Yes / No
Seabird Marine mammal interactions <i>(Give brief details)</i>	
IUU vessels sighted or detected <i>(Give details, date / time / position)</i>	
Lost gear recovered <i>(Give details)</i>	

General Comments *(comment on any items considered important for immediate attention)*

Appendix 4 Proposed IOTC Observer training curriculum

Recruitment

Candidates for observer training should be assessed and ideally have the following specific skills and work experience prior to being accepted for observer training;

- Numeric, literacy and logic skills
- Ability to work alone
- Physical fitness
- Capacity to live in potentially hostile environments, and ability to maintain standards of conduct
- Preferably at sea experience

Compulsory pre-requisite training for observers prior to them being registered as IOTC certified observers to include:

1 Basic Sea Survival, Familiarization and Personal Safety and Social Responsibility Training (STCW95 A-VI/1-1; A-VI/1-4 & A-VI/1 *IMO requirements*) includes instruction on:

- Introduction to safety and survival;
- Emergency situations;
- Evacuation;
- Survival craft and rescue boats;
- Personal life saving appliances;
- Survival at sea

Prepare observers to react in emergency situations where there is an imminent danger to flooding, fire or having to abandoning the vessel at sea.

2 Fitness to Work at Sea

Prior to deployment all observers are required to have an in-date high seas medical certificate as well as inoculations required for tetanus, yellow fever and typhoid, depending on the ports of embarkation and disembarkation.

Proposed basic observer training curriculum

CPCs should include the following basic content in their training of observers. Assessment criteria that the observer has acquired these skills should be provided with the submission of candidates to the IOTC for accreditation.

Modules	Output
The role of the Observer	Describe the role of observers and the objectives of different categories of observers. (Scientific-data collection officers / Compliance – monitoring)
Observer Protocols	In the context of data collection note the value of their work in fisheries management.
Conduct on board	Introduce onboard expected observer conduct. Protocol when interacting with the officers and crew.
Cultural awareness	Cultural training, provide a list of do and don'ts Elements of communication and conflict resolution
Ship layout and terminology	Describe the basic layout of fishing vessel of different designs and used in the different fisheries. Understand the common use of nautical terminology. Provide advice where relevant information can be collected that the observer will be required to record. Explain working and observation areas and where best to carry out routine sampling and monitoring observations. Provide a breakdown of the different personnel onboard their responsibilities and seniority.
Observer Health and Safety practices	Explain importance and procedure to undertake a pre-sea safety inspections and vessel safety tour.
(In-house training) Supports formal certified survival training.	Introduce observers to safe working practices onboard a vessel. Run through safety protocols, emergency communication and contact information. Advise observers on various health issues that can be experienced onboard and personal first aid. Provide advise on dangers in collecting samples or moving around onboard a vessel engaged in active fishing Advise observers on the procedures to follow and potential dangers that may be encountered during personnel transfers from one vessel to another.
Fishing methods, gear and related equipment	Present a detailed description of different fishing methods, equipment and the terminology and functions of each of the gear components. <ul style="list-style-type: none"> • Purse Seine • Pelagic Longline • Pole and Line • Gillnet Describe different target species and by-catch associated with the different fishing methods used Observers need to know what gear components to measure and how to take such measurements.
Species identification <i>Identification of commercial fish and crustacean species and the main by-catch species caught per fishing sector</i>	Observers need to be taught the basic nomenclature for recording family, genus and species and the danger of incorrect identification from using common names The main species targeted in the Indian Ocean region will be covered together with the most prevalent by-catch species. Observers will be taught methods to identify fish, from specific diagnostic features using ID guides provided. Method of recording and preserving samples of un-identified species will be described.
Sampling methodologies	Provide instruction to estimate weight / numbers of catch from various techniques (volume of hold / volume of wells / brails etc.)
Observer gear, care and maintenance	Provide instruction on the use and calibration of sampling equipment and recording data in working situations and the care and maintenance of sampling equipment.

Navigation and navigational aids	<p>Provide instruction on the basics of navigational theory to understand positioning, (latitude and longitude), course and speed.</p> <p>Provide instruction to record position and depth data from various electronic navigation systems such as, GPS, plotters, echo-sounders and sonar.</p>
Oceanography and Meteorology	<p>Provide instruction on basic oceanography of the Indian ocean region covering currents, sea surface temperatures (SST) and regional up-welling. This should include methods of recording wind strength and speed, sea and swell and SST.</p>
Onboard data collection and recording Data forms and electronic data recording	<p>Provide instruction for recording data on prescribed data forms and correct methods of completing these forms.</p> <p>Note the need for accuracy and methods to cross check data.</p> <p>(Additional Instruction on electronic data bases to cover data capture from data sheets should be considered)</p>
<p>Communication and reports-</p> <ul style="list-style-type: none"> ▪ Trip reports, submission - timeline and circulation ▪ Report writing formats 	<p>Provide instruction on writing and submitting reports and report writing techniques</p> <p>Note the formats and the optional methods of sending these back to their controlling authority.</p> <p>Observers need training in radio communication protocols (VHF, HF & Inmarsat)</p>
<p>Sea Bird, Marine Mammal and Turtle identification and sampling strategies</p> <p>Shark identification and sampling strategies</p>	<p>Provide instruction on using field guides for seabird, marine mammal and turtle and shark identification.</p>
Monitoring interactions of fishing gear with non-target marine fauna (seabirds, marine mammals, turtles, dugongs, sharks).	<p>Provide instruction on the risk of interactions between fishing gear and various marine fauna, (especially protected and critically endangered species).</p>
Monitoring effectiveness of bycatch mitigation measures.	<p>Note the various methods of observing for, and recording these.</p> <p>Details on mitigation measures to prevent interaction with other marine fauna need be covered, including <i>inter alia</i> the use of,</p> <ul style="list-style-type: none"> • bird scaring lines, • increasing line sink-rates • escape panels in purse seine nets • circle hooks.