



**The South African Tuna Pole Trip report**  
*Braveheart*

**ICCAT Registration No. :**

**Observer: Siphelo Macozoma**

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## *Trip Summary*

The South African flagged tuna pole and line fishing vessel (*Braveheart*) vessel registration DTP 722A was engaged in the fishing activity as per the Fisheries Improvement Project (FIP) a project managed by WWF South Africa (WWF-SA) and funded Marine Stewardship Council's (MSC) Ocean stewardship Fund. The South African observer Siphelo Macozoma was deployed on the vessel to collect scientific and compliance data. The vessel was targeting albacore tuna (*Thunnus alalunga*) and tuna like species. Fishing occurred at the North of Cape Point in the Western Cap, South Africa. The fishing occurred over 2 days from the 25/10/2022 and the 27/10/2022. As the fishing was interrupted by the bad weather on the 26/10/2022 and that resulted into no fishing at all on the day.

The vessel sailed from Hout Bay harbour on the 24/10/2022 at 00:10, and started fishing on the following day on the 25/10/2022 to 27/10/2022 (for 2 days), and the vessel returned to Hout Bay harbor immediately after the last attempt to make a catch. The vessel docked on the 28/10/2022 at about 02:05, boarding time was 00:10 on the 24/10/2022 and disembark at 18:53 on the 27/10/2022. The electronic access database, laptop, sampling equipment and data sheets were made available to the observer for data sampling purposes.

Tuna pole vessel gear was composed of six poles and six gaffs for 12 men. Six poles were fitted with hook and artificial squid-like bait and additional man was responsible for the chum (sprinkling bait in the water during the fishing activity). The vessel was equipped with acoustic sonar used to detect the fish. Stern were fitted with three trolling lines also called strikes baited with artificial squid-like bait and the starboard side was fitted with 10-meter water pipe with small holes punched (water sprinkler). Fishing activity started when the fish was detected on the strikes or on the sonar, and the water sprinkler was used to confuse the fish while poles were used to lure it closer to the vessel starboard side. The fishing activity lasted for an average of 5 to 15 minutes, with a total of 15 stops or attempts were conducted for the entire trip. Pilchard (*Sardinops sagax*) was used as a chumming bait, while artificial squid was used on poles and strikes. All fishing attempts were 100% observed. There were no days lost.

The retained species was *Thunnus alalunga*, and *Thunnus obesus* the catch weight was confirmed by the vessel captain using eye estimates. There were no other species retained.

The 58 *T. alalunga* were measured for fork length (F.L) and no further samples were taken.

The chumming bait attracted seabirds to feed on bait, this was noted as a major attraction for seabirds and that led to a number of seabirds hovering over the vessel. Fortunately, for the entire trip, there were no seabirds or marine mammals caught or entangled on the fishing gear.

About 15 vessels also targeting tuna were sighted in the area. The identifiable vessels were; Kula, Mane, Ocean Clipper, Easy Rider, Alalunga, Jacqueline, Tamara, Puffin, Windoek, Taryn-amy, Sailfish, Malagas II, Santa Cruz, Predator and Kariba. There were no illegal unreported and unregulated (IUU) vessel sighted in the area.

## A. Trip Summary

Table 1.1: Trip summary

BOARDING				DISEMBARKATION			
Date	24/10/2022	Time (GMT)	00:10	Date	27/10/2022	Time (GMT)	18:53
Location		Hout Bay (-34.0562 S, 18.3401 E)		Location		Hout Bay (-34.0562 S, 18.3401 E)	

## B. Vessel Details

Table 1.2: Vessel details

Vessel name:	Braveheart	Call sign:	ZS2930
Port of registration:	Hout Bay	Flag State:	South Africa
Owner:	Sundawn Resources	Charterer:	None
Vessel type:	Tuna pole	Fishing gear:	Tuna pole
Size (GRT):	25	Length (LOA):	

## C. Electronic Equipment

Table 1.3: Electronics equipment

ELECTRONIC EQUIPMENT	
On-board acoustic equipment:	Furuno
Position fixing equipment:	
Vessel monitoring system (present/absent):	Present
Radar:	Furuno
Communications equipment:	VHF Icom IC-M802, HF Icom M802
Plotters:	Furuno

## D. Fishing Operation Summary

**Table 1.4: Fishing operations summary**

<b>Total number of days in the fishing area</b>	3
<b>Total number of days fished</b>	2
<b>Days lost (weather, breakdown...)</b>	1
<b>Total number of days steaming.</b>	2
<b>Target species</b>	Albacore tuna and tuna like species
<b>Total number of sets.</b>	15
<b>Total number of hooks set</b>	6
<b>Total number of hooks lost</b>	0
<b>Total number of hooks sampled</b>	6
<b>Total number of sets sampled</b>	15
<b>Bait used</b>	Pilchard frozen and artificial squid
<b>Origin of Bait</b>	South Africa
<b>Bait Ratio</b>	80% Pilchard and 20% Artificial Squid
<b>Total number of Crew members</b>	12

## E. Gear Description

The fishing gear only comprised of a set of fishing poles with a short line and hook fitted with artificial bait, a set of three trolling lines baited with an artificial squid-like bait and placed astern of the vessel. The vessel was further equipped with bamboo gaffs and a J-shaped steel attached to it to assist lifting the fish onto the fishing vessel.

**Table 1.5: Gear Description**

<b>Gear Description</b>					
<b>Poles 1</b>	Material	Bamboo	<b>Gaff</b>	Material	Bamboo
	Average Length (m)	4m		Average Length (m)	3m
	Number	5		Number	5
	Average Nylon Length (m)	0.5m			

<b>Poles 2</b>	Material	Bamboo	<b>Hooks</b>	Barb present		No
	Average Length (m)	4m		Brand		
	Number	6		Size		

<b>Troll Lines</b>		<b>Used (√)</b>	<b>Yes</b>	<b>No</b>
Length of a troll line – 1 (m)		Attached Object	No	
Length of a troll line – 2 (m)		Attached Object	No	
Length of a troll line – 3 (m)		Attached Object	No	
<b>Lure Lines</b>		<b>Used (√)</b>	<b>Yes</b>	<b>No</b>
Lure line bait material		Hooks present (√)		
Average Casting coverage (m)		Was it mitigating Seabirds		

## F. Retained Catch Details

**Table 1.6: Catch Details**

Date (dd/mm/yyyy)	Species	Square number (1°x1°)		Processing code	Processed number
25 October 2022	ALB	325	50	RD	
25 October 2022	YFT	1	1	GT	
27 October 2022	ALB	133	60	RD	
27 October 2022	YFT	1	1	GT	

### Processing Details

A whole fish was retained.

**Table 1.7: Retained fish**

Species	Processing Code	Comments
ALB	RD	Whole fish was retained in its round form.
YFT	GT	Gilled, gutted and tailed

### Fish Discards

All the catch was retained and 100% of the albacore tuna species was caught by the vessel.

**Table 1.8: Fish discards**

Date (dd/mm/yyyy)	Species	Square number (1°x1°)	Number or Weight (kg)	Reason
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	0	0	0	There were no discards
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**Table 1.9: Tags made**

Species	Tag type	No. animals tagged	Comments
0	None	0	No tags made.

**Table 2.1: Tags recovered**

Tag No.	Species	Length (cm)	Length type	Weight (kg)	Weight type	Position of recovery	Finder details	Comments (eg. Full label on tag, tag type)
0	0	None	None	None	None	Lat: N/S Long: E	None	There were no tags recovered

## G. Biological Data Summary

### Biological Data Collection

There was a total of 111 individuals sampled and measured.

**Table 2.2: Species sampled and measured**

Species	Total No. individuals sampled	No. measured	No. weighted	No. Sexed	Maturity stage recorded	Otoliths collected	Other (specify)	Carcasses retained
ALB	109	109	Not recorded	Not recorded	Not recorded	0	None	0
YFT	2	2	Not recorded	Not recorded	Not recorded			

### Biological Sample Storage Location

There were no samples stored.

**Table 2.3: Type of Sampling and Storage**

Sample type	Species	No. collected	Location to be sent/stored
None	0	0	There were no samples stored.

### Biological Sub-sampling Methodologies

The albacore & Yellowfin was measured for fork length using a tape measurement. No further samples taken.

## H. Summary of Meteorological Details

The sea was rough with strong winds on the first day of fishing but the fishing occurred but on the second day the fishing couldn't take place at all due to a bad weather ripples and 2.8 meters of swell height from south east. The weather was changing from day to day.

## I. Summary of Fishing Strategy

The vessel used 3 trolling lines, poles and acoustic sonar to detect the fish. Birds diving and water ripples were also used to detect the fish from the distance. The captain also used they used historical and forecast sea surface temperatures to decide the fishing ground. Once the fish was detected and the bait master would be immediately throw live bait. The water will be released, and the pole men and gaffers would be on standby to put sticks in the water.

## J. Summary of Depredation

**Table 2.4: Summary of Depredation**

<b>Depredation</b>	<b>Comment (YES/NO/FIGURES)</b>
Number of sets with observed depredation	No sets were observed
Percentage of sets with observed depredation	No percentage of sets were observed
Percentage of catch per species damaged by depredation	No percentage of catch per species were damaged
Was fish loss attributed to predator but not directly observed?	No fish loss attributed to predator
List of predator species observed	No species observed to be depredated

## K. Summary of Incidental catches

### Mitigation Measures

There are no official mitigation measures for the fishery. The seabirds were not much of a trouble because there was less number of seabirds in many instances (+- 15 birds per stop), hence there was no proper mechanism at disposal.

**Table 2.5: Mitigation Measures**

<b>Mitigation Measures</b>	<b>Comment (YES/NO/FIGURES)</b>
Did the vessel operate south of 25°S?	No
List of mitigation measures used	No mitigation measures were applied
<b>If Tori lines were used: Tori was never used</b>	
What was the number of sets on where the Tori lines were deployed?	?
What was the percentage of sets on which Tori lines were deployed?	?
Were the Tori lines constructed according to the guidelines recommended by IOTC?	?

### Incidental catches

**There were no incidental catches.**

**Table 2.6: Incidental catches**

Species Type	Date (dd/mm/yyyy)	Species (Scientific name)	Square number (1°x1°)	Fate	Comments
Seabirds	25/10/2022 - 27/10/2022	0	0	<b>Dead: 0</b> <b>Released</b> <b>alive: 0</b>	No birds caught
Marine Mammals	25/10/2022 - 27/10/2022	0	0	<b>Dead: 0</b> <b>Released</b> <b>alive: 0</b>	No marine mammals caught
Sea Turtles	25/10/2022 - 27/10/2022	0	0	<b>Dead: 0</b> <b>Released</b> <b>alive: 0</b>	No sea turtles caught
Sharks	25/10/2022 - 27/10/2022	0	0	<b>Dead: 0</b> <b>Released</b> <b>alive: 0</b>	No sharks caught

**L. Lost Fishing Gear**

There was no gear lost, all fishing gear was retained onboard.

**Table 2.7: Lost Fishing Gear**

Lost Gear			
Nylon (m)	0	Poles (numbers)	0
Artificial Baits (numbers)	0	Hooks (numbers)	0

**M. Waste Generated****Table 2.8: Waste categories generated by the vessel at sea**

Waste Category	Action at Sea
Food	Retained on board and kept in a big plastic
Cardboard & Papers	Retained on board and kept in a big plastic
Plastic	Retained on board and kept in a big plastic
Fishing gear	Retained on board
Oil	Retained on board and kept in drums
Glass	Retained on board

**N. Vessel Sightings**

There were 13 vessels also targeting tuna sighted in the area and only 11 names were recorded.

**Table 2.9: Vessel Sightings**

Vessel Name	Type of Vessel (fishery, factory ship, carrier, e.t.c)	Vessel position (Lat, Long)	Vessel Activity	Comment
Kariba	Fishery	Not recorded	Fishing the Albacore tuna	



Ku-ula	Fishery	Not recorded	Fishing the Albacore tuna	
Mane	Fishery	Not recorded	Fishing the Albacore tuna	
Ocean Clipper	Fishery	Not recorded	Fishing the Albacore tuna	
Easy Rider	Fishery	Not recorded	Fishing the Albacore tuna	
Alalunga	Fishery	Not recorded	Fishing the Albacore tuna	
Jacquiline	Fishery	Not recorded	Fishing the Albacore tuna	
Tamara	Fishery	Not recorded	Fishing the Albacore tuna	
Puffin	Fishery	Not recorded	Fishing the Albacore tuna	
Windhoek	Fishery	Not recorded	Fishing the Albacore tuna	
Taryn-amy	Fishery	Not recorded	Fishing the Albacore tuna	
Sailfish	Fishery	Not recorded	Fishing the Albacore tuna	
Malagas II	Fishery	Not recorded	Fishing the Albacore tuna	
Santa Cruz	Fishery	Not recorded	Fishing the Albacore tuna	
Predator	Fishery	Not recorded	Fishing the Albacore tuna	

## O. General comments

- General the vessel personnel was cooperative and were willing to assist whenever the observer needed. There were no seabirds caught. No sea-mammals that were caught either;
- The vessel is fitted with Furuno omni pulse acoustic sounder that scans 360 degrees below the vessel to detect the fish;
- Albacore fish caught was wrapped with a plastic and packed/kept in freezer, whole and unprocessed (whole, live);
- There were no fish discards. There fish was caught and kept round(whole, live);
- The vessel personnel and the officers complied with all the permit conditions.

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