

South African National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2013

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Department of Agriculture, Forestry and Fisheries

INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

In accordance with IOTC Resolution 10/02, final scientific data for the previous year was provided to the Secretariat by 30 June of the current year, for all fleets other than longline [<i>e.g.</i> for a National report submitted to the Secretariat in 2013, final data for the 2012 calendar year must be provided to the Secretariat by 30 June 2013)	YES 25/07/2012
In accordance with IOTC Resolution 10/02, provisional longline data for the previous year was provided to the Secretariat by 30 June of the current year [<i>e.g.</i> for a National report submitted to the Secretariat in 2020, preliminary data for the 2013 calendar year was provided to the Secretariat by 30 June 2012). REMINDER: Final longline data for the previous year is due to the Secretariat by 30 Dec of the current year [<i>e.g.</i> for a National report submitted to the Secretariat in 2013, final data for the 2012 calendar year must be provided to the Secretariat by 30 December 2013).	YES 25/07/2012
If no, please indicate the reason(s) and intended actions:	

Executive Summary

South Africa has two commercial fishing sectors which either target or catch tuna and tuna-like species as bycatch in the Indian Ocean. These sectors are swordfish/tuna longline (the shark longline fishery has been incorporated into this sector), pole and line/ rod and reel. In addition, there is a boat-based recreational/sport fishery.

1. BACKGROUND/GENERAL FISHERY INFORMATION

1.1. TUNA/SWORDFISH LONGLINE

This fishery was commercialized in 2005, with the issuing of 18 swordfish-directed and 26 tuna-directed long term (ten year) fishing rights. The fishery is restricted to 50 permits (one permit per vessel) through a Total Applied Effort (TAE) control until quotas are stipulated for this region. The large pelagic longline fishery was deliberately split into swordfish and tuna-directed sub-sectors due to the drastic declines in swordfish CPUE experienced during the period of the experimental fishery from 1997 to 2005. South Africa amended its fishery policy in 2007 after only 9 swordfish-directed longline vessels operated in 2006 resulting in the lowest annual catch since 2001. The fishery is allowing an interim period for foreign vessels to charter in this sub-sector as a means of skills development and a means of acquiring suitable vessels. The fishery is in the process of encouraging foreign vessel owners in the tuna-directed sub-sector to reflag their vessels and to transfer skills to South Africans.

South Africa submitted a bigeye tuna fishing plan (CoC 07/13) to the Commission meeting of the IOTC, thereby notifying the Commission of South Africa's intention to exceed 1000 t of bigeye tuna in future as the fishery develops. Prior to 2002 most of longline fishing effort was concentrated in the Atlantic Ocean. Fishing effort only started increasing in the Indian Ocean since 2001 with the development of ice and processing facilities at Richard's Bay, which is situated on the east coast of South Africa. The targeting and catches of tropical bigeye and yellowfin tunas has proven more successful in the Indian Ocean, resulting in a sizeable amount of the longline fishing effort concentrated in the Indian Ocean. This fishery is now the most important South African tuna fishery operating in the Indian Ocean in terms of tonnage landed.

In 2005 the shark longline sector was split into a demersal shark longline component, which predominantly targets soupfin and hound sharks, and a pelagic longline component, which predominantly targets shortfin mako and blue sharks. The latter also catches tunas and swordfish as bycatch. This fishery was split as a precursor to phase out the targeting of pelagic sharks due to the concern over the stock status of these species. South Africa consolidated the pelagic shark fishery with the tuna/swordfish longline fishery in March 2011. Seven shark exemption holders were permitted to fish in 2010, but only four vessels were active in the Indian Ocean. Six of the seven shark exemption holders were issued with tuna/swordfish rights in March 2011, five of which are actively fishing. These vessels are undergoing a phase out period to reduce shark targeting and focus on tuna and/or swordfish catches. Pelagic sharks are generally managed as bycatch in the tuna and swordfish longline fishery.

1.2. POLE AND LINE/ROD AND REEL

The use of pole and line has been employed commercially since the 1970s to target tuna. In 1979 commercial tuna fishing effort increased after a record run of yellowfin tuna off Cape Point. Subsequent to this, the South African tuna fishery has essentially been a surface pole

and line fishery that targets mainly juvenile (3-4 year old) albacore in near-shore waters off the west coasts of South Africa and Namibia. The fishery generally operates between September and May along the west coast of South Africa. It is important to note that within the tuna pole fishery there has been an emerging rod and reel component that targets large yellowfin tuna (> 45 kg dressed weight) south of Cape Town. Although the fishing ground lies just outside the IOTC area the yellowfin catch is presumed to be of Indian Ocean origin.

South Africa also has a commercial linefish fishery which opportunistically catches albacore, yellowfin, king mackerel and shark in the Indian Ocean using rod and reel when linefish species such as kob, geelbek and slinger are not available. These catches usually only contribute to a small percentage of the total catch by the linefishery due to the multispecies nature of the fishery.

2. FLEET STRUCTURE

Fishing Sector	Fleet Structure		
	Nr Active Permits	Vessel size range (m)	Trip duration (days)
Tuna/swordfish longline (pelagic shark longline, inclusive in total)	24 (3)	19 - 50	7 - 90
Pole & Line	7	10 - 49	2 - 30
Rod & Reel (commercial)	335	4 - 8	1
Rod & Reel (recreational)	Unknown	4 - 10	1

Table 1. Number of vessels operating in the IOTC area of competence, by gear type and size, in 2012.

3. CATCH AND EFFORT (BY SPECIES AND GEAR)

Table 2 a). Annual pelagic longline catch (t dressed weight excluding albacore) and effort (number of hooks) of primary species in the IOTC area of competence from 2007 to 2012.

Year	Total number of hooks	Bigeye tuna	Yellowfin tuna	Albacore	Southern bluefin tuna	Swordfish	Shortfin mako	Blue shark
2007	2891580	413.6	738.3	97.9	38.9	206.4	27.5	87.8
2008	3142204	377.6	513.6	176.5	13.5	237.6	38.6	106.8
2009	3030966	505.4	829.8	107.9	25.0	163.4	35.5	70.8
2010	3502189	605.1	901.2	45.8	4.3	304.8	34.4	76.3
2011	4521104	643.3	816.7	229.5	32.0	321.1	360.4	178.5
2012	3535570	641.1	431.8	148.5	58.6	277.1	209.6	139.3
Total	20623613	3186	4231	806	172	1510	706	659

Table 2 b). Annual pole and line/rod and reel catch (t dressed weight excluding albacore) and effort (number of days) of primary species in the IOTC area of competence from 2007 to 2012.

Year	Total number of catch days	Albacore	Yellowfin tuna
2008	79	4.6	4.5
2009	14	1.2	0.0
2010	2	3.5	0.0
2011	25	45.67	0.7
2012	31	15.3	0.2
Total	151	70.2	5.4

Figure 1. Historical combined annual catch (t dressed weight excluding albacore) of primary species for the national pelagic longline and pole and line/road and reel fleets for the IOTC area of competence for the entire history of the fishery/fleet.

Year	Bigeye tuna	Albacore	Yellowfin tuna	Southern bluefin tuna	Swordfish	Tuna unid	Blue shark	Shortfin mako shark
Pelagic longline								
1997	0.0	0.0	0.0	0.0	37.5		0.0	0.0
1998	9.0	5.3	44.2	0.2	275.5		4.3	1.8
1999	12.6	1.1	112.7	0.0	48.9		4.2	4.0
2000	29.3	16.1	205.0	2.5	20.0		4.6	5.2
2001	28.8	7.0	121.9	0.1	237.1		5.7	2.8
2002	220.8	75.2	155.4	0.8	666.5		12.7	32.7
2003	218.2	67.4	543.9	0.2	634.7		15.9	67.0
2004	292.9	59.2	655.1	8.7	216.0		15.2	31.2
2005	687.5	112.4	1190.0	23.1	190.0		37.4	43.3
2006	52.5	62.9	153.8	7.0	153.4		3.9	9.4
2007	468.6	118.0	862.9	39.1	238.2		32.0	96.8
2008	388.6	194.1	524.1	13.9	243.7		41.0	117.2
2009	533.5	121.8	890.9	25.4	177.0		38.6	78.1
2010	704.6	60.7	1070.1	4.3	355.5		42.0	90.9
2011	691.3	254.7	940.9	33.4	371.0		431.3	224.7
2012	671.9	161.7	522.2	60.6	300.3		221.3	171.7
Pole and line/road and reel								
1989		0.0	16.8			0.0		
1990		0.0	11.6			0.0		
1991		0.0	0.0			9.5		
1992		0.0	0.0			0.0		
1993		0.0	0.0			0.0		
1994		0.9	0.0			0.0		
1995		0.0	2.1			0.0		
1996		0.0	0.0			0.0		
1997		0.0	0.0			0.3		
1998		1.0	6.8			0.8		
1999		0.0	0.0			0.0		
2000		0.0	0.0			0.0		
2001		9.3	6.3			0.0		
2002		2.2	0.0			0.0		
2003		0.0	1.3			8.5		
2004		0.2	4.1			0.5		
2005		0.0	4.1			0.0		
2006		86.4	13.5			8.1		
2007		0.0	0.0			0.0		
2008		4.6	4.5			0.0		
2009		1.2	0.0			0.0		
2010		3.5	0.0			0.0		
2011		45.7	0.7			0.0		
2012		15.3	0.2			0.0		

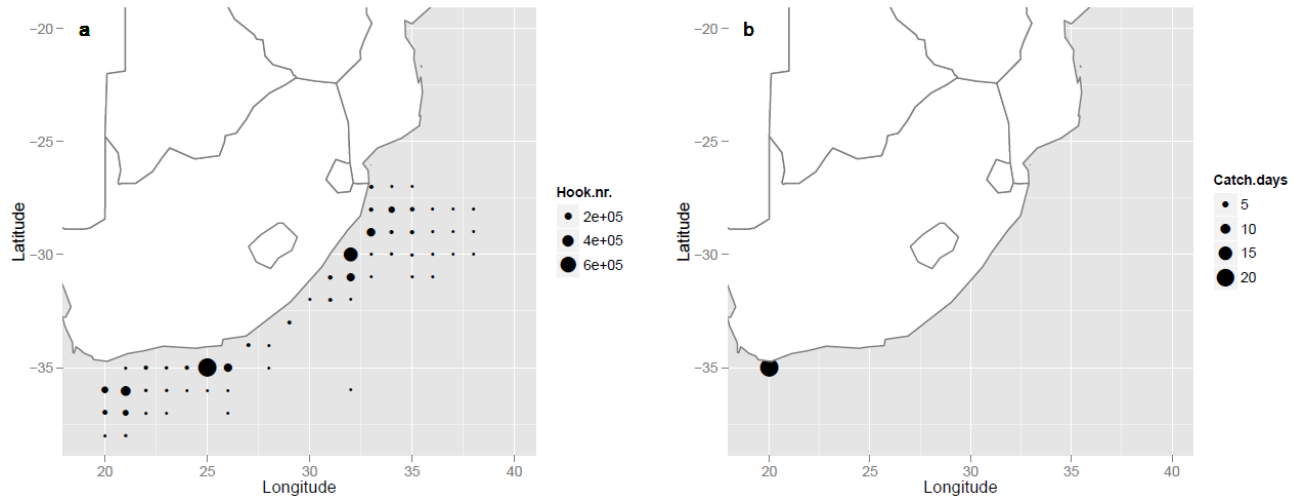


Figure 2a. Map of the distribution of fishing effort for a) pelagic longline (number of hooks) and b) pole and line/rod and reel (number of days) for the national fleet in the IOTC area of competence in 2012.

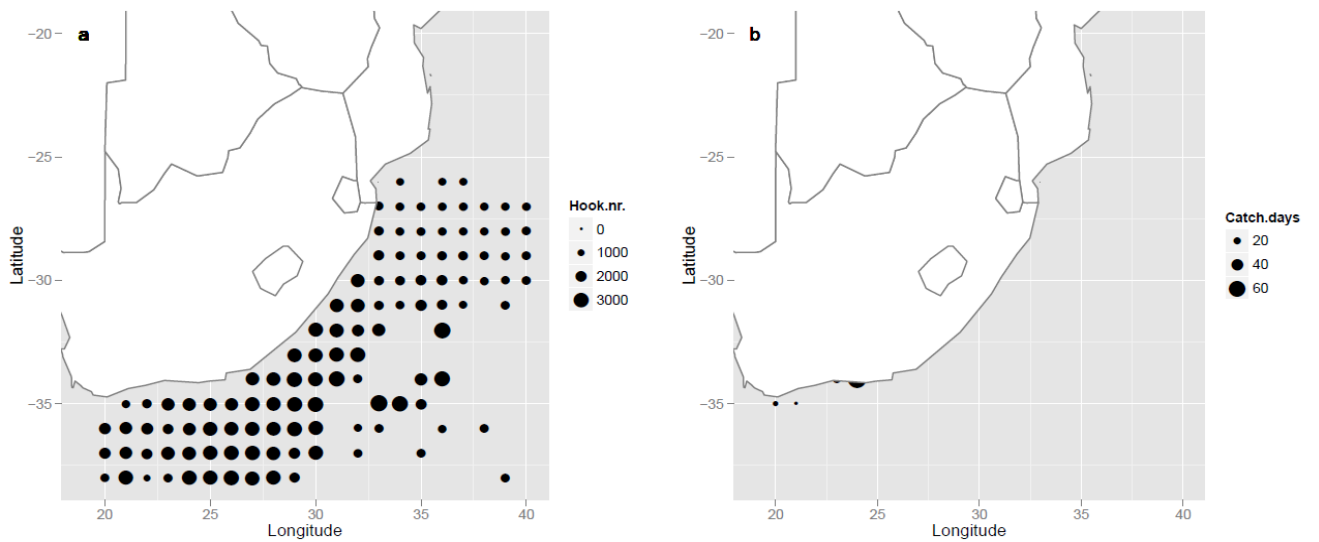


Figure 2b. Map of the distribution of average a) pelagic longline (number of hooks) and b) pole and line/rod and reel (number of days) effort from 2007 to 2012 in the IOTC area of competence.

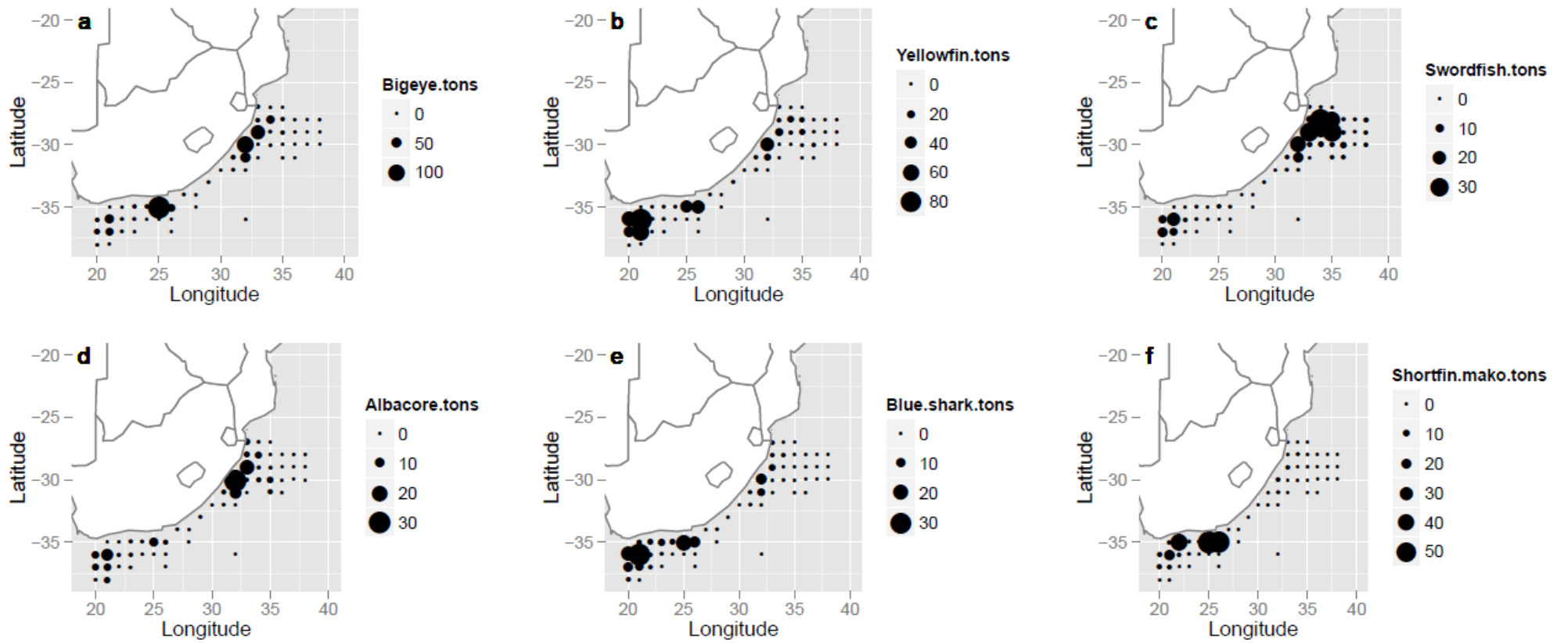


Figure 3a. Map of distribution of fishing catch (tons), for a) bigeye tuna, b) yellowfin tuna, c) swordfish, d) albacore, e) blue shark and f) shortfin mako shark for pelagic longline in South Africa, in the IOTC area of competence in 2012.

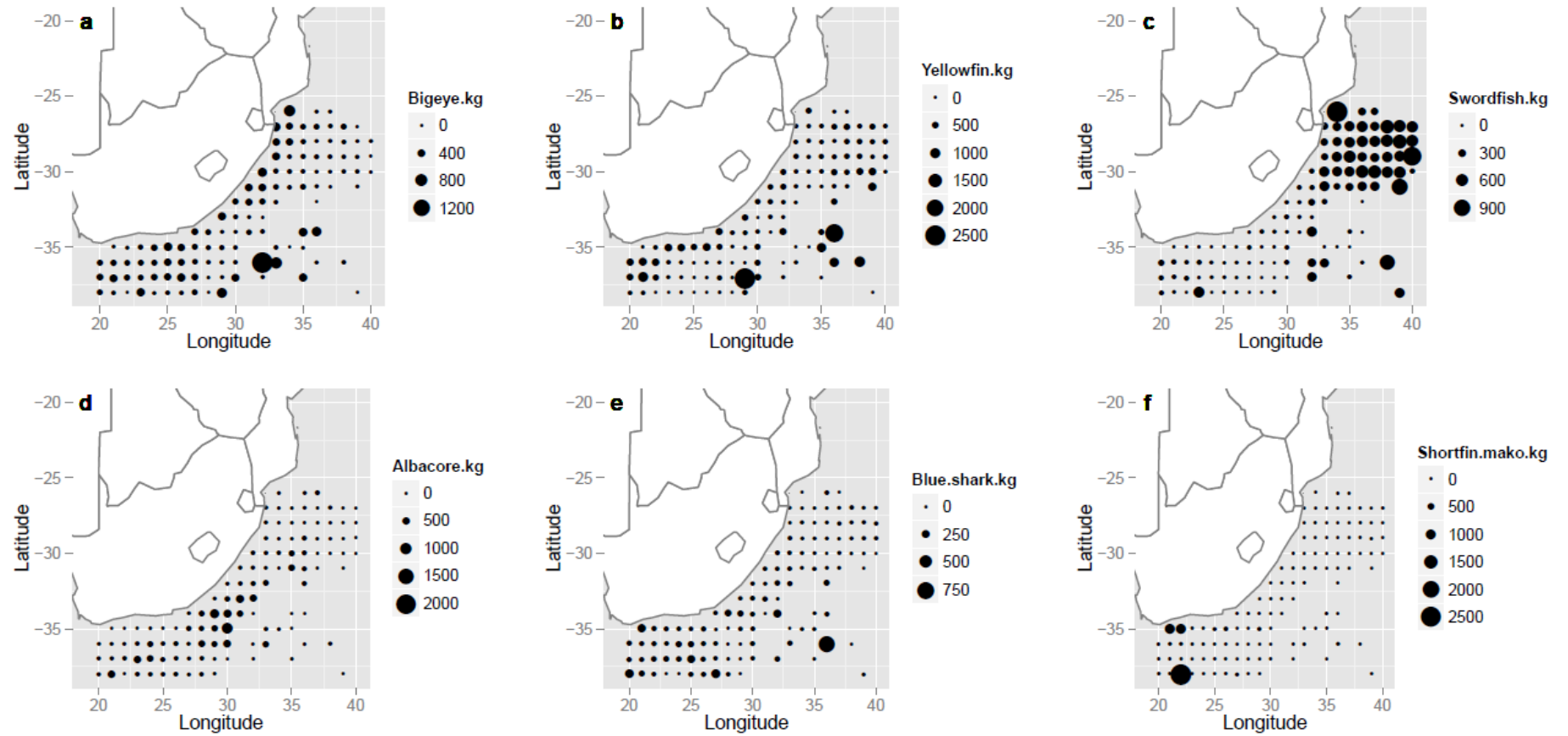


Figure 3b. Map of distribution of pelagic longline average catches (tons) from 2007 to 2012 for a) bigeye tuna, b) yellowfin tuna, c) swordfish, d) albacore, e) blue shark and f) shortfin mako shark in the IOTC area of competence.

4. RECREATIONAL FISHERY

The recreational fishery uses rod and reel from ski-boats (5-8 m) to target numerous game fish, including yellowfin, king mackerel and billfish. Although catch and effort data are unknown for this fishery it is estimated that over 100 t of yellowfin and king mackerel are landed annually for the Atlantic and Indian Oceans combined. All recreational fishers are required to purchase a permit and are restricted to a bag-limit of 10 tuna, 5 swordfish and 5 billfish per day, with the sale of catch prohibited. There are further weight restrictions of 3.2 kg for yellowfin and bigeye, 6.4 kg for southern bluefin and 25 kg for swordfish caught.

5. ECOSYSTEM AND BYCATCH ISSUES

Sharks

The NPOA for sharks has been finalised and will be launched at the 2013 ICCAT Commission meeting being held in Cape Town, South Africa.

A precautionary upper catch limit (PUCL) of 2000t dressed weight of *Chondrichthians* was enforced in 2012. Foreign flagged fleets may not land *Chondrichthians* that exceed 10% of the total dressed weight of tuna species per season. South African flagged vessels may not land *Chondrichthians* that exceed 50% of the total dressed weight of tuna species per season.

Thresher sharks belonging to the genus *Alopias*, hammerhead sharks (belonging to genus *Sphryna*), oceanic whitetip and silky sharks shall not be retained on board the vessel.

Fins may only be landed from shark trunks that are retained on board and both the fins and trunks must be landed together at the first point of landing. If the Permit Holder chooses to remove the shark fins from the trunks then the maximum weight of fins landed or retained on board shall not exceed 13% for blue sharks and 8% of the total weight of all other shark species trunks. If the Permit Holder chooses to keep the fins attached to the specific trunk (either through a partial cut and folded over or tethered to the trunk via a cord) then no ratio shall apply.

Table 3. Total number and dressed weight in tons of sharks, by species, retained by the national fleet in the IOTC area of competence from 2008 to 2012.

Year	Blue shark nr.	Blue shark tons	Shortfin mako shark nr	Shortfin mako shark tons	Requiem sharks nr.	Requiem sharks tons
2008	5929	117.2	1967	41.0	53	516
2009	3730	78.1	1989	38.6	0	3
2010	4424	90.9	2072	42.0	5	94
2011	13319	224.7	18675	431.3	586	30280
2012	11021	171.7	8184	221.3	456	16795

Seabirds

South Africa has been collecting data on seabird interaction with its longline fishery since 1998. South Africa has finalized its NPOA for seabirds and was published in 2008. The NPOA-SEABIRDS specifies a maximum mortality rate of 0.05 birds/1000 hooks, and lays out bycatch mitigation measures for use in longline fishing. South Africa has introduced a number of bird mitigation measures through permit conditions since the start of its fishery, including the compulsory flying of tori-lines, no daylight setting, and use of thawed bait to improve sink rates, in the tuna fishery. South Africa does not consider the use of line shooters or offal discard management to be useful in reducing seabird incidental mortality. Furthermore, South Africa has developed a management plan to reduce seabird by-catch in its longline fishery in 2008. This plan includes a seabird limit per vessel per year that was implemented in 2008. Once a vessel reaches 25 birds killed in a year, it must adopt additional mitigation measures, it has to fly a second tori line and it has to place additional weights on to each branchline. Since the implementation of seabird mitigation measures and the stringent monitoring thereof seabird mortality rates has reduced by more than an order of magnitude. The current seabird mortality rate for 2012 and 2013 is for the first time in history below the stipulated rate of 0.05 birds/1000 hooks.

Marine Turtles

The South African government has worked closely with WWF to educate skippers on release procedures for turtles. Skippers are provided with guidelines/instructions on how to safely handle and release caught turtles in their permit conditions. The use of circle hooks are encouraged as stated in the permit conditions, as well as releasing turtles with the use of a dehooker. As of this year, skippers are required to record interactions with turtles in the catch statistic logbooks on board the vessel. The fate of the turtle is included.

Table 5. Observed annual catches of seabirds and marine turtles and marine mammals in the national pelagic longline fleet from 2006 to 2012, in the IOTC area of competence.

Seabirds								
Species	2006	2007	2008	2009	2010	2011	2012	Total
Albatross Unid	8	21		36	16	18	1	100
Albatross Black browed		24	5	12	10	5		61
Albatross Grey Headed		15	3		1	4	4	27
Albatross Northern Royal				1				1
Albatross Shy	6	252	41	73	28	23	11	434
Albatross Wandering		16	3		5			24
Albatross Indian Yellow nosed		66	5	14	32	58	11	186
Albatross Atlantic Yellow nosed						10	18	28
Gannet Cape		61		7	12	10	1	91
Gannet Unid	1							1
Petrel Cape		5		33		1		39
Petrel Giant		5						5
Petrel Great-Winged		1						1
Petrel Grey			1					1
Petrel Pintado				1				1
Petrel Southern Giant		8	1	6				15
Petrel Unid	2	96	1	27	1	45	1	173
Petrel White chinned	2	590	96	198	57	208	75	1226
Shearwater flesh-footed						1		1
Shearwater Unid				1				1
Skua				2		1		3
Tern Unid				1				1
Unidentified bird		15	1	51				67
Marine turtles								
Species	2006	2007	2008	2009	2010	2011	2012	Total
Turtle green			1		1	1	1	4
Turtle Leatherback	1	14	5	2	17	4	1	44
Turtle Loggerhead Sea Turtle	1	13	5	4	2	5	1	31
Turtle Olive Ridley		6	2	1				9
Turtle Flatback						1		1
Turtle Unid	1	9	2	6	4	1		23
Turtle Hawksbill							1	1
Marine mammals								
Species	2006	2007	2008	2009	2010	2011	2012	Total
Cape fur seal			1					1
Seal unid	2	1		1		1		5
Killer Whale	1	1			1	1		3
Dolphin common					1			1
Dolphin BottleNose		1		1				2
Dolphin unid	2	1	1					4

6. NATIONAL DATA COLLECTION AND PROCESSING SYSTEMS

6.1. Logsheet data collection and verification (including date commenced and status of implementation)

Vessels in the tuna/swordfish longline fishery have been required to complete daily logs of catches since 1997. The data are verified by comparing logs of catches with landing declarations that are overseen by South Africa Fisheries Compliance Officers.

6.2. Vessel Monitoring System (including date commenced and status of implementation)

The Vessel Monitoring System (VMS) became a requirement in 1998 for longline vessels and was subsequently followed by the tuna pole vessels. All longline, pole and line/rod and

reel vessels are required to have a functional VMS system on board that transmits directly to the Department's base station. It is the vessels responsibility to ensure that the VMS transmits data prior and throughout the duration of the trip.

6.3. Observer programme (including date commenced and status; number of observer, include percentage coverage by gear type)

The observer program was established in 1998, at the start of the experimental phase of the pelagic longline fishery, and a minimum 20% observer coverage was stipulated. The Offshore Resources Observer Programme (OROP) began in March 2002 and requires 100% observer coverage on foreign-flagged vessels. Up until March 2011, 11- 20% observer coverage was achieved on local vessels per year based on the total effort deployed. The observer programme contract expired in March 2011 and the Department is in the process of re-establishing the programme. The observer programme for charter vessels has continued with 100% of fishing trips on charter vessels observed. There were 15 observers actively observing on the tuna/swordfish longline vessels in 2012. There are no observers stationed on pole and line vessels; however, increased inspections and sampling of pole vessels is covered in port by South Africa Fisheries Compliance Officers.

Table 6. The number of trips and number of hooks observed, including charter vessels, per year from 2008 to 2012 in the IOTC region.

Year	Number of hooks observed	Percentage of total effort in IOTC region	Number of trips observed
2008	3288378	77	34
2009	3118159	70	43
2010	2441265	48	32
2011	3112535	65	20
2012	2438303	64	19

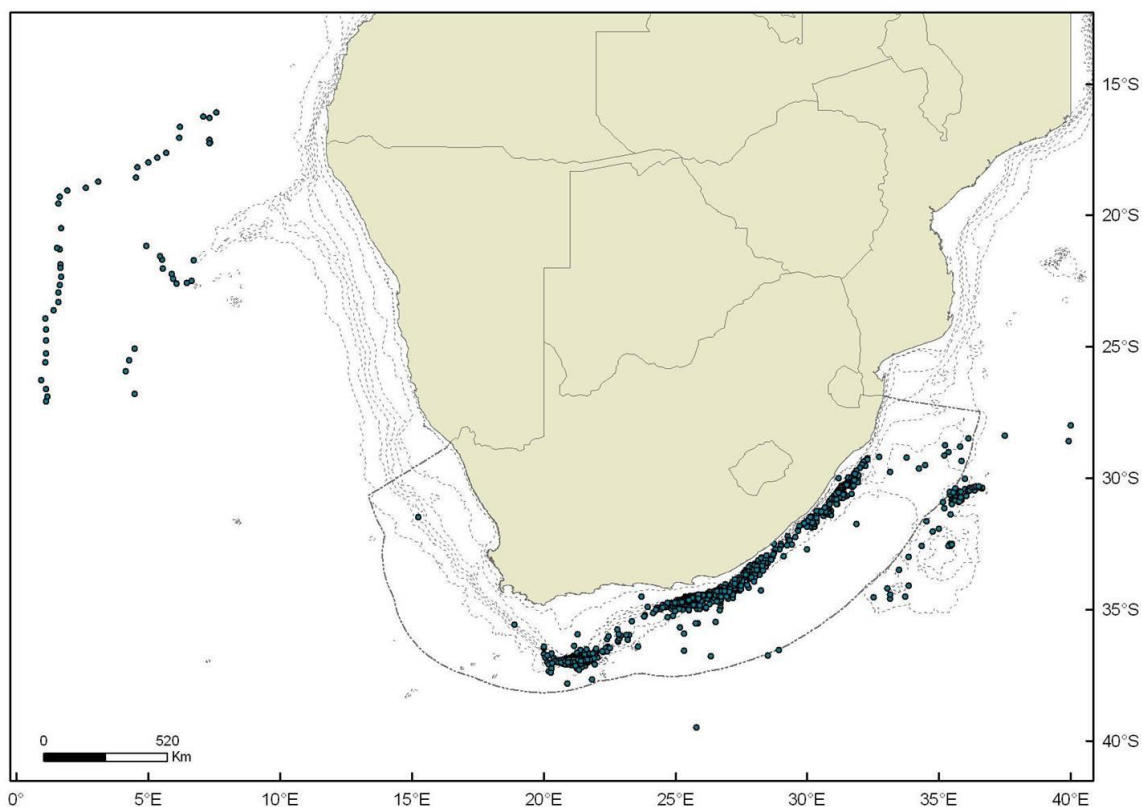


Figure 4. Map showing the spatial distribution of observer coverage in 2012. Each point represents a line set.

6.4. Port sampling programme [including date commenced and status of implementation]

Port sampling for tuna, swordfish and related species began in 1973 in the IOTC region.

The collection of albacore length frequency data through port sampling of pole and line/rod and reel vessels in 2011 has been achieved by employees of the Department of Agriculture, Forestry and Fisheries. The vessels send in yellowfin tuna length frequency data that they have taken onboard the vessel prior to dressing the catch.

Length frequencies on the longline vessels are collected at sea by observers prior to the fish being dressed.

Table 7. Number of individuals measured by observers on pelagic longline vessels in 2012 in the IOTC area of competence

	Number of length frequency measurements
Yellowfin tuna	12741
Skipjack tuna	826
Bigeye tuna	8138
Southern bluefin tuna	411
Swordfish	672
Albacore	6002
Blue shark	2199
Shortfin mako shark	726

6.4. Unloading/Transshipment [including date commenced and status of implementation]

Unloading or discharging of fish from a longline vessel can only be undertaken in the presence of a monitor or by a South African Fisheries Control Officers. Transshipment of fish is not permitted at sea. Transshipments of fish in port requires pre authorisation. South Africa is striving towards 100% monitoring of tuna pole discharges in port. These measures have been in place since 1998.

7. NATIONAL RESEARCH PROGRAMS

Various projects were initiated in 2008 including: collection of material for studying the age and growth of albacore and bigeye tuna; the life history, stock delineation and spatial movement and distribution of bigeye tuna, swordfish and blue sharks between the Atlantic and Indian Oceans. The Department, with the assistance of NGOs (Birdlife SA) and universities, continued to assess the impact of longline fisheries on seabirds and investigated various mitigation and management measures. The recent establishment of a large pelagic fishery represents an important milestone in the development of South African fisheries. However, research activities directed at the large pelagic species targeted by longline are in its infancy in South Africa and to date only four dedicated research trips have been undertaken since 2008.

South Africa's involvement in the South West Indian Ocean Fisheries Programme (SWIOFP) through Component 4: Assessment and sustainable utilization of large pelagic resources has provided momentum to our research programme. The primary focus is to understand the distribution and movement of swordfish, bigeye and yellowfin tuna within the SWIO region, to which end 15 pop-up archival tags (PATs) were provided for deployment on swordfish, yellowfin and bigeye tunas as well as hook monitors and time depth records for deployment of an instrumented longline. Prior to the inception of this project two bigeye tuna and four blue sharks had been tagged with PATs and 441 blue sharks with conventional tags.

In 2010, three yellowfin tuna were tagged with PAT tags provided by SWIOFP. The three tags popped up and transmitted data earlier than what they were programmed for, indicating that the animals had died prematurely and the tags had exceeded their depth limit of 1200m. The trends in the data are yet to be analysed in detail to understand the cause of these premature pop-ups. Three blue sharks were also tagged with PAT tags in 2010 and a further two blue sharks were tagged with SPOT tags in 2011. The Department's national research cruise in 2011 was a momentous achievement during which 11 swordfish were successfully PAT tagged in the SWIO region with SWIOFP tags. Swordfish have proven to be very sensitive to handling and South Africa is the first country to achieve PAT tagging of swordfish in this region. Tags have been programmed for either 90 or 180 days. Of the 11 tags, 4 remained on the swordfish for more than 2 months. The results of this study were presented at the IOTC Working Party for Billfish in 2012 (Document number IOTC-2012-WPB10-16).

A National Plan of Action for seabirds was also published in 2008, which aimed to reduce seabird mortalities below 0.05 seabirds.1000 hooks⁻¹. Good collaboration with the fishing

industry, researchers and managers, continual refining of mitigation measures, the implementation of stringent management measures through permit conditions, and close monitoring through the observer programme has resulted in seabird mortalities to decrease and the mortality rate in 2012 was reached the goal identified in the NPOA- seabirds of 0.05 seabirds per thousand hooks. Trials are currently underway to test the efficiency of the Hook Pod device, under Birdlife International and Fishtek, and the Smart Tuna Hook, under Ocean Smart, to reduce seabird mortalities.

South Africa aims to conduct further research on the movement of large pelagic species between the Indian and Atlantic Oceans by placing more satellite (PSAT and SPOT) tags on animals, in particular albacore. Coupled with movement data, genetic studies on the difference between swordfish from the two Ocean basins is currently being explored.

South Africa has 3 years of instrumented longline data from the dedicated research cruises which should be analysed in a target and bycatch study.

Table 8. Summary table of national research programs, including dates

Project title	Period	Countries involved	Budget total	Funding source	Objectives	Short description
GE netic St ructure and M igration O f albacore tu N a (GERMON).	2013 - 2015	EU – France, Reunion, Seychelles, South Africa		EU	Study the genetic structure, spawning and feeding of albacore in the Indian Ocean and the connectivity with the Atlantic Ocean.	In the Indian Ocean, it is thought that there is only one southern stock, distributed from 5°N to 45°S, because there is no northern gyre and low catches in northern regions. This hypothesis needs to be investigated and more particularly the link between Indian Ocean and South Atlantic. In South African waters, mainly juveniles are caught and the source is still unknown. To determine the connectivity between these stocks is of primary concern for Regional Fishery Management Organizations.

8. IMPLEMENTATION OF SCIENTIFIC COMMITTEE RECOMMENDATIONS AND RESOLUTIONS OF THE IOTC RELEVANT TO THE SC.

Table 9. Respond with progress made to recommendations of the SC and specific Resolutions relevant to the work of the Scientific Committee – the Secretariat to provide a table for completion no later than 60 days prior to the next SC meeting.

No.	Resolution	Scientific requirement	CPC progress
05/05	Concerning the conservation of sharks caught in association with fisheries managed by IOTC	Paragraphs 1–12.	South Africa has provided all its historic shark data to IOTC. The fins and trunks of all sharks caught have to be retained and the shark fin to trunk ratio should not exceed 8%. In the Large Pelagic fishery a 10% shark by-catch limit was imposed between 2006 and 2010 and skippers were required to release live sharks. From 2011 no wire traces are allowed to be used within 50cm from the hook. The upper precautionary catch limit for sharks is set at 2000t dressed weight for the entire South African longline fishery. Only charter vessels are restricted to a 10% shark by-catch limit.
10/02	Mandatory statistical requirements for IOTC members and cooperating non contracting parties	Paragraphs 1–7.	South Africa submits nominal catch data and catch and effort data for surface and longline fisheries. Size data is collected through the observer program and port sampling.
10/06	On reducing the incidental bycatch of seabirds in longline fisheries.	Paragraph 7.	A report outlining measures that are being implemented to reduce seabird bycatch was sent to the IOTC in February 2013.
11/04	On a regional observer scheme	Paragraph 9.	100% observer coverage is achieved on charter vessels. The observer programme for domestic vessels expired in 2011 and the Department is currently in the process of re-establishing the programme which would require 20% coverage of domestic fishing trips.
13/03	On the recording of catch and effort by fishing vessels in the IOTC area of competence	Paragraphs 1-9	All longline and pole and line/rod and reel vessels are required to complete a logbook of catch and effort and submit this on a monthly

No.	Resolution	Scientific requirement	CPC progress
			basis to the Department.
12/04	On the conservation of marine turtles	Paragraphs 3, 4 6-10	A report outlining measures that are being implemented to manage marine turtle bycatch was sent to the IOTC in February 2013.
12/09	On the conservation of thresher sharks caught in association with fisheries in the IOTC area of competence	Paragraphs 4-8	Thresher sharks are not allowed to be retained onboard the vessel.

9. LITERATURE CITED