



**SCIENTIFIC COMMITTEE
TENTH REGULAR SESSION**

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**ANNUAL REPORT TO THE COMMISSION
PART 1: INFORMATION ON FISHERIES, RESEARCH, AND STATISTICS**

WCPFC-SC10-AR/CCM-05

EUROPEAN UNION

WCPFC - ANNUAL REPORT TO THE COMMISSION INFORMATION ON FISHERIES

PART I

2013

1. For 2013, the list of Portuguese authorized vessels to operate within the WCPFC is indicated below:

PRT00000115	ILHA BRAVA	L-3-N
PRT000001538	VERDEMILHO	V-1065-C
PRT000001540	VISTA ALEGRE	A-3148-C
PRT000016119	ARTICO	PD-400-N
PRT000016290	COSTA DE SAO JORGE	PD-464-C
PRT000018876	NOVOS HORIZONTES	V-27-N
PRT000019088	HEMISFERIO NORTE	A-3300-N
PRT000022649	VALMITÃO	PM-1291-N
PRT000023043	NOVO RUIVO	V-25-N
PRT000023093	ALMA LUSA	PM-1269-N

2. In 2013, only the Portuguese fishing vessel “ARTICO” was involved in fishing activity in the WCPFC Convention Area. This vessel has a special fishing permit conditioning the fishing activity in the WCPFC area to the mandatory installation of ALC equipment and corresponding certification (VTAF).
3. This vessel is a surface longliner with 50,75m (LOA) and 764 GT, targeting for tuna and tuna like species.
4. During 2013, the PRT FV “ARTICO” was present in the WCPFC-CA for 304 days, as monthly indicated in the table below:

MONTH	FISHING DAYS
1	21
2	9
3	31
4	30
5	31

6	30
7	15
8	31
9	28
10	31
11	16
12	31
Total	304

5. Catch composition of the catches made by this vessel while fishing in WCPFC were as follows:

Vessel	ALB	BET	BIL	BLM	BSH	DOL	LEC	SMA	YFT	TOTAL(KG)
ARTICO	1.978	13.425	14.6	304.301	292.525	8.134	17.152	77.973	0.149	730.237

6. This vessel had no observer on board, this is the reason why size composition data is not available.
7. Operational data is collected from electronic logbook data, crosschecked with VMS, with 100% coverage.
8. The gear used is the monofilament surface longline (Florida style modified), using an average of around 1100 hooks per set. The characteristics of this vessel were the same as in years before.
9. All fishermen operating in international waters are permanently informed about the measures adopted by the corresponding RFMO, including those taken to mitigate the impact on seabirds of fishing for species covered by WCPFC.
10. Concerning mitigation measures on turtles and seabirds, the following procedures have been indicated by the only Portuguese FV operating in this RFMO:

SEABIRDS (CMM 07-04)

- Deep-setting line shooter: The vessel uses hydraulic equipment to begin the fisheries operations with the main line less than 1 m from the stern so the hooks can sink rapidly;
- *Tori lines*: The vessel uses the lines as described in CMM 2007-04 since the begging of the fishing operations;
- Weighted branch lines: The vessel uses weights of 80 g attached to within 3,5 ms of the hook, for all hooks of the main line;

- Blue dyed bait: The bait used is dyed in blue
 - Management of offal discharge: practice of strategic offal discharge from the opposite side of the boat to hauling. When setting no offal discharge is done so that birds are kept away;
 - Logbook for registration of any by-catches of seabirds is ensured.
- Seabird captures in 2013, by species and area

Species	South of 30°S	Latitude	Longitude	Date	Fate
ANTIPODEAN ALBATROS	x	38° 47,4'S	174° 31,6'W	16/03/2013	Dead
SOUTHERN ROYAL ALBATROS	x	38° 20,3'S	170° 15,8'W	12/04/2013	Dead

Concerning mitigation measures to avoid catches of sea turtles:

- circle hooks are already being used at a rate of 50% in longline sets;
- Deeper setting: hooks are set at depths around 80 meters (deeper than turtle abundance, less than 40 m), the hydraulic equipment make hooks sink rapidly and branch lines are weighted (use of weights of 80 g attached to within 3,5 ms of the hook, for all hooks of the main line);
- Night setting: the lines are set during the night with the vessels' lights off and all operations are done in lower level;
- Use of blue dyed bait as to avoid attracting sea turtles;
- Release techniques with line cutters and de-hooker sticks;
- Fishermen have information on handling methods to assess the condition of the turtles before releasing, identifying the species name, return to the sea, ensuring higher survival rates and reducing post-release mortality. The Interaction is recorded on logbook.

Registers of interactions with turtles in 2013:

Species	Latitude	Longitude	Date	Fate
Leatherback	39° 11,3'S	176° 41,5'W	17/04/2013	Alive
Leatherback	38° 58,4'S	175° 50,1'W	27/04/2013	Alive
Leatherback	25° 02,5'S	179° 21,9'W	15/09/2013	Alive

1.- PURSE SEINE

1.1.- Annual catch and effort by primary species in the WCPFC Convention Area.

Fishing vessels operating in the eastern Pacific Ocean have 100% coverage of onboard observers, in line with the Agreement on the International Dolphin Conservation Program (AIDCP). Although this agreement applies to vessels operating in the IATTC convention area, the four EC-flagged purse seiners operating in the Pacific Ocean have carried out their activity in both the IATTC and WCPFC Convention Areas during 2013, and observers of the APICD have covered c. 80% of the catch in weight. Information from trips not covered by observers of the APICD is obtained from logbooks. Total catches reported by the observers and logbooks, catches to the east of 150°W and discards of the three main target species during 2013, as well as in previous years, are shown in Table I.

	2013			
	WCPFC	WCPFC east of 150°W	Discards	No. Sets
BET	8133	242	19	
SKJ	31596	799	752	665
YFT	5281	45	7	

	2012				2011			
	WCPFC	east of 150°W	Discards	No. Sets	WCPFC	east of 150°W	Discards	No. Sets
BET	5423	108	18		7367	72	18	
SKJ	20579	257	742	555	27907	507	97	593
YFT	6169	10	30		4177	112	4	

	2010				2009			
	WCPFC	east of 150°W	Discards	No. Sets	WCPFC	east of 150°W	Discards	No. Sets
BET	4912	4	36		3817	35	50	
SKJ	20520	53	258	446	19712	198	1026	417
YFT	4041	21	9		3071	22	62	

Table I- Total catches (in metric tonnes) of BET, SKJ and YFT from EU purse seiners in the WCPFC convention area, in the WCPFC-CA east of the 150°W meridian, estimated discards and number of sets during the last 5 years.

1.2.- Number of vessels by size

As in previous years, 4 EU-Spain flagged purse seiners fished in the WCPFC-CA in 2013, with gross register tonnages of 1562, 2468, 2502 and 3200 GRT. Tuna are mainly caught by sets on FADs, but also on free schools. Catches are frozen onboard in salt vats. Table II summarizes the number of vessels and total gross register tonnages from the beginning of the fishery in the WCPFC-CA.

Year	GRT	No. vessels
1996	1351	1
1997	1351	1
1998	4419	3
1999	8176	4
2000	6887	4
2001	9172	4
2002	9172	4
2003	10678	5
2004	6532	3
2005	6532	3
2006	6532	3
2007	9732	4
2008	9732	4
2009	9732	4
2010	9732	4
2011	9732	4
2012	9732	4
2013	9732	4

Table II- Number of EU purse seiners and total gross register tonnage in the WCPFC-CA by year.

1.3.- Fishing patterns

Figure 1 shows the distribution of the catches (5° x 5°) of EU purse seiners in the WCPFC-CA during 2013 and the five previous years.

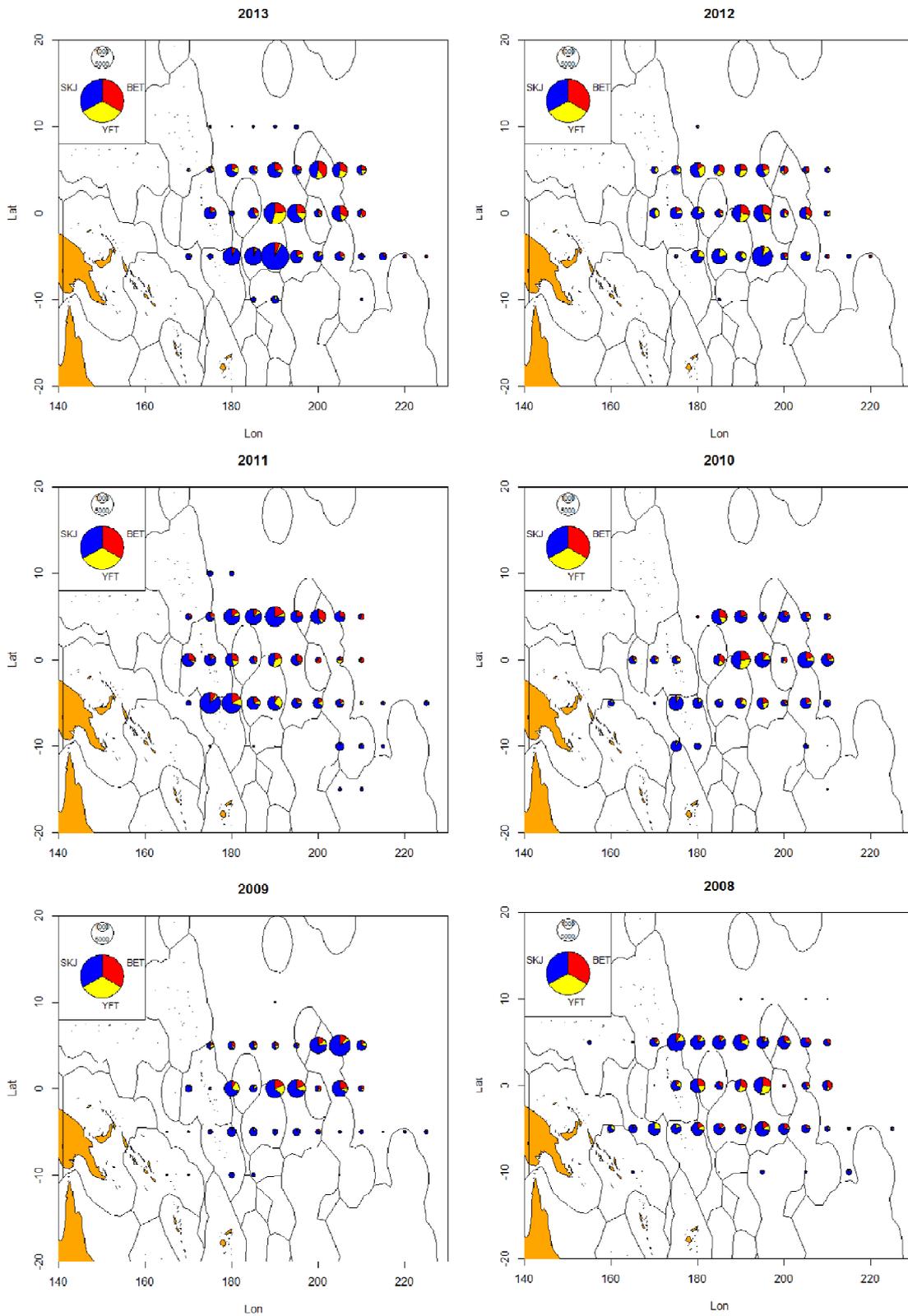


Fig. 1- Distribution of catches by area (5°x5°) and species in 2008-2013.

The distribution of the catches shifted slightly west in 2013 in relation to 2012, with higher catches in Kiribati EEZ, in the Phoenix Islands region. This is probably related to minor changes in ENSO conditions. The distribution of fishing effort during 2008-2013 is shown in figure 2. The fishing effort is mainly distributed around the equator (10° S to 10° N) and in the area from 180E to 160W, and shown some variations in the core area of the fishery.

1.4.- Estimated total catches of non-target, associated and dependent species.

Tables III and IV summarize the purse seine bycatch by species in the WCPFC-CA in 2013 and 2014, respectively. In most cases, only the number of fish of each species per set is recorded by the observers. The total weight has been estimated by multiplying the number of fish in each size category (small, medium, large) by an average weight for the purse seine fishery provided by the IATTC (N. Vogel, pers. comm.).

6 species account for *c.* 90% of the bycatch, in terms of weight: Silky shark, blue and black marlin, dolphinfish, wahoo and triggerfish.

Around 28% of the *Carcharinus falciformis*, the main shark species bycatch of the purse seine fleet, as well as 55% of the *C. longimanus* captured in 2013 was estimated to be released alive. These figures are similar to the ones estimated in 2012, of *c.* 30% and 60% for silky and oceanic whitetip sharks, respectively.

There is a mandatory Spanish protocol for releasing marine turtles caught by purse seine alive. All turtles involved in fishing operations must be released in the best conditions as soon as possible. In 2012, no marine turtle was involved in purse seine fishing operations within the WCPFC-CA (observer coverage: 65% of the total catch in weight). In 2013, two interactions were recorded (observer coverage: 78% of the catch in weight). One of the turtles was not identified, and the other was a loggerhead turtle. Both were released unharmed.

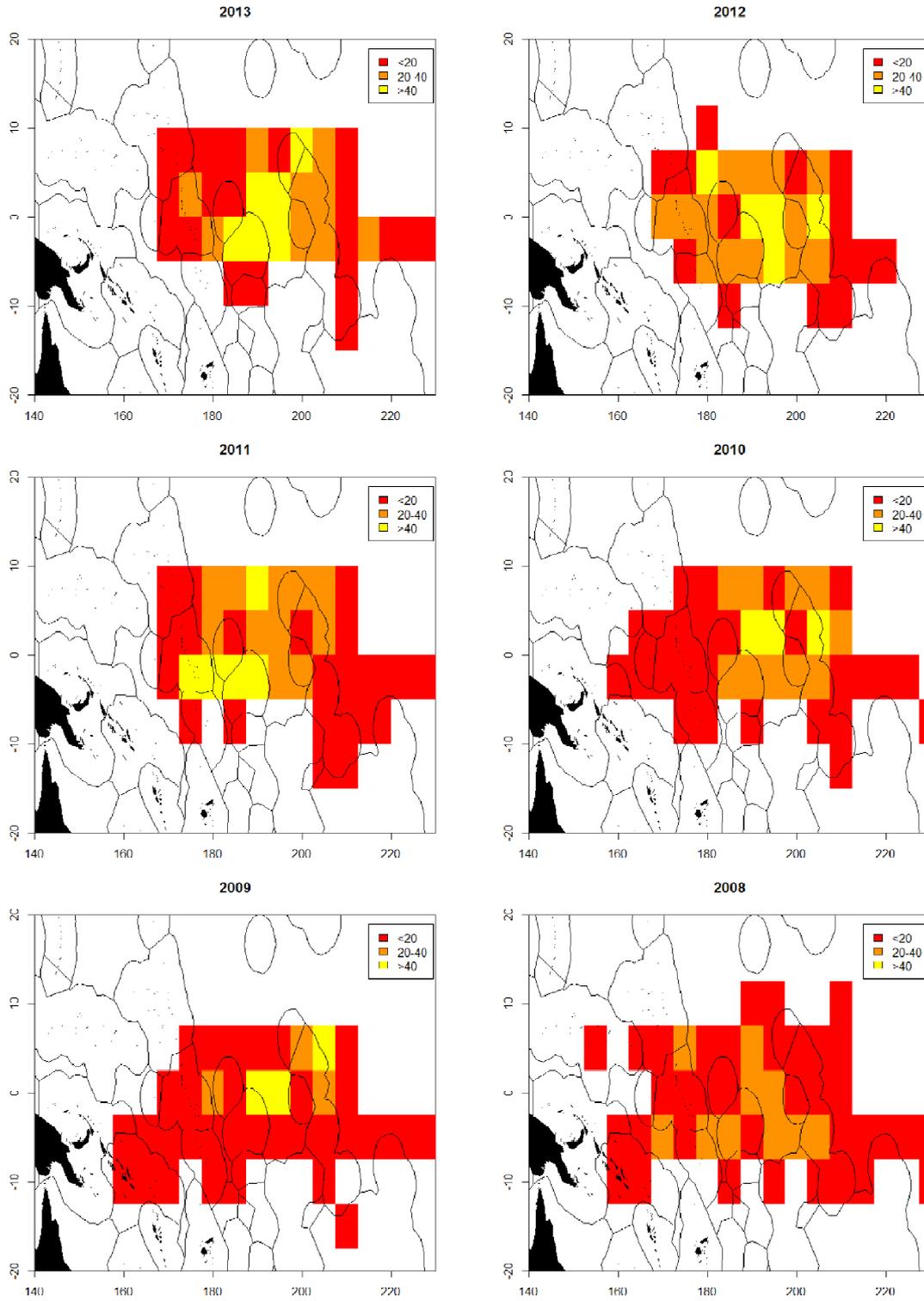


Fig. 2.- Distribution of the purse seine effort, in fishing days, by area (5°x5°) and quarter in 2012.

	Species	WCPFC	East of 150 ° W
BILLFISH	<i>Istiophoridae, Xiphiidae</i>	0.24	0.00
	<i>Istiophorus platypterus</i>	0.23	0.00
	<i>Makaira indica</i>	12.40	0.28
	<i>Makaira nigricans</i>	23.86	0.15
	<i>Makaira, Tetrapturus</i>	0.47	0.00
	<i>Tetrapturus audax</i>	1.24	0.00
	<i>Xiphias gladius</i>	0.26	0.00
SHARKS & RAYS	<i>Carcharhinus falciformis</i>	31.52	1.47
	<i>Carcharhinus longimanus</i>	0.79	0.03
	<i>Carcharhinus spp.</i>	0.73	0.00
	<i>Manta birostris</i>	0.03	0.00
	<i>Mobula japonica</i>	0.12	0.00
	<i>Mobula spp.</i>	0.11	0.00
	<i>Mobula thurstoni</i>	0.05	0.00
	<i>Pteroplatytrygon violacea</i>	0.01	0.00
	<i>Sphyrna zygaena</i>	0.24	0.00
	OTHER FISH	<i>Ablennes hians</i>	<0.01
<i>Acanthocybium solandri</i>		10.15	2.84
<i>Aluterus monoceros</i>		0.03	0.03
<i>Aluterus scriptus</i>		<0.01	<0.01
<i>Aluterus spp.</i>		<0.01	0.00
<i>Balistes polylepis</i>		<0.01	<0.01
<i>Canthidermis maculatus</i>		15.34	0.16
<i>Caranx caninus</i>		<0.01	0.00
<i>Caranx sexfasciatus</i>		0.07	0.00
<i>Coryphaena equiselis</i>		<0.01	0.00
<i>Coryphaena hippurus</i>		15.81	2.05
<i>Decapterus macarellus</i>		0.54	<0.01
<i>Elagatis bipinnulata</i>		5.73	0.06
<i>Kyphosus analogus</i>		<0.01	0.00
<i>Kyphosus elegans</i>		0.07	0.00
<i>Kyphosus spp.</i>		0.01	0.00
<i>Lobotes surinamensis</i>		0.04	<0.01
<i>Mola mola</i>		0.28	0.00
<i>Naucrates ductor</i>		<0.01	0.00
<i>Remora remora</i>		<0.01	0.00
<i>Sectator ocyurus</i>		0.24	0.13
<i>Selar crumenophthalmus</i>		0.04	0.00
<i>Seriola lalandi</i>		0.26	0.00
<i>Seriola rivoliana</i>		<0.01	0.00
<i>Seriola, Caranx spp.</i>		<0.01	0.00
<i>Sphyrna barracuda</i>		0.22	<0.01
<i>Uraspis helvola</i>		<0.01	0.00
Others, NEI	0.04	0.00	

Table III.- Purse seine bycatch in metric tonnes in the WCPFC-CA and in the WCPFC-CA east of meridian 150°W during 2013. These figures have been estimated from the bycatch records of the trips carrying observers of the AIDCP (78.40% of the total catch in weight in the WCPFC-CA), assuming a similar composition of the bycatch in trips without observers onboard.

	Species	WCPFC	East of 150 ° W
BILLFISH	<i>Istiophorus platypterus</i>	0.09	0.00
	<i>Makaira indica</i>	1.15	0.00
	<i>Makaira nigricans</i>	16.06	0.29
	<i>Makaira, Tetrapturus</i>	0.34	0.00
	<i>Tetrapturus angustirostris</i>	0.02	0.02
	<i>Xiphias gladius</i>	0.04	0.00
SHARKS & RAYS	<i>Carcharhinus falciformis</i>	22.87	0.12
	<i>Carcharhinus longimanus</i>	0.44	0.00
	<i>Mobula spp.</i>	0.16	0.00
	<i>Mobulidae</i>	0.28	0.00
	<i>Mobulidae, Dasyatidae</i>	0.01	0.00
	Sharks, nei	0.02	0.00
	<i>Sphyrna zygaena</i>	0.16	0.00
OTHER FISH	<i>Ablennes hians</i>	<0.01	0.00
	<i>Acanthocybium solandri</i>	12.53	0.36
	<i>Aluterus monoceros</i>	0.06	0.00
	<i>Aluterus scriptus</i>	<0.01	0.00
	<i>Balistidae</i>	0.1	0.00
	<i>Balistidae, Monocanthidae</i>	0.09	0.00
	<i>Canthidermis maculatus</i>	7.59	0.15
	<i>Caranx caballus</i>	<0.01	0.00
	<i>Caranx sexfasciatus</i>	<0.01	0.00
	<i>Caranx spp.</i>	<0.01	0.00
	<i>Coryphaena equiselis</i>	4.37	0.00
	<i>Coryphaena hippurus</i>	15.32	0.34
	<i>Coryphaenidae</i>	0.15	0.00
	<i>Decapterus macarellus</i>	0.11	0.00
	<i>Elagatis bipinnulata</i>	7.43	0.02
	<i>Kyphosus analogus</i>	<0.01	0.00
	<i>Kyphosus elegans</i>	0.05	<0.01
	<i>Kyphosus spp.</i>	<0.01	0.00
	<i>Lobotes surinamensis</i>	0.02	<0.01
	<i>Mola mola</i>	4	3.81
	<i>Naucrates ductor</i>	<0.01	0.00
	<i>Sectator ocyurus</i>	0.69	0.11
	<i>Seriola rivoliana</i>	0.09	0.00
<i>Seriola, Caranx spp.</i>	0.04	0.00	
<i>Sphyrna barracuda</i>	0.51	<0.01	
<i>Uraspis helvola</i>	0.01	0.00	
Others, NEI	0.4	0.02	

Table IV.- Purse seine bycatch in metric tonnes in the WCPFC-CA and in the WCPFC-CA east of meridian 150°W during 2012. These figures have been estimated from the bycatch records of the trips carrying observers of the AIDCP (65.74% of the total catch in weight in the WCPFC-CA), assuming a similar composition of the bycatch in trips without observers onboard.

3.- RESEARCH AND STATISTICS

In the case of the purse seine fishery, in addition to the observer coverage of WCPFC authorised programs, 78% of the catch in the WCPFC-CA, including bycatch, was monitored by IATTC and national program observers of the Agreement on the International Dolphin Conservation Program (AIDCP).

Additionally, in keeping with the current CMMs, EU purse seiners fishing in the WCPFC-CA have a 100% coverage of ROP observers. These observers also record information on size and species composition, vessel activity, bycatch, etc. However, this information is submitted directly to the Science Service Provider and not reported to the flag State, and is not included in the current report.