

OBSERVER TRIPS CARRIED OUT BY THE SPANISH OCEANOGRAPHIC INSTITUTE IN THE INDIAN OCEAN IN 2003.

(NATIONAL PROGRAMME FOR SECURING BASE DATA. EC-SPAIN.)

by

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SUMMARY

This document presents some of the preliminary results obtained by the Spanish observers on board tuna purse-seiners operating in the Indian Ocean in 2003. Four campaigns were undertaken on tuna purse-seiners in the Indian Ocean with a joint duration of 110 days at sea and 73 sets, 2,916 t commercial catches were obtained over floating objects and 745 t over free schools. Discards were practically null in catches over free schools (0.16% of the total catch), while they amounted to 4.7% of the total catch for floating objects.

Key Words: Indian Ocean, Tropical Tunas, Observers, Purse seiners, Catches, FADs, Free Schools, Discards.

Introduction

In order to comply with the basic requirements for contributing catch data, fishing effort, discards and size distribution per species and specific biological parameters, arising from participation in the various Regional Fishing Organisations (ORPs), the European Union has set up a programme in each Member State, designed to collect this information. In Spain, this programme is called National Base Data Plan (PNDB).

This document presents some of the preliminary results obtained by the Spanish Oceanographic Institute (IEO), in 2003, through observers on board tuna purse-seiners operating in the Indian Ocean.

Material and Methods

The base data have been collected according to the indications in the Manual for Observers embarked on tuna purse-seiners (PNDB), in collaboration with Spanish organisations: IEO and AZTI and IRD (France).

Results

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Throughout 2003, four campaigns were undertaken on tuna purse-seiners in the Indian Ocean with a joint duration of 110 days at sea. Tables 1 and 2 show the main characteristics of the campaigns: dates of beginning and end, duration, geographical area where each was carried out, total number of sets and types of schools, as well as the percentage of positive sets per type of association.

There were 73.52 (71%) total sets over floating objects and 21 over free schools (29%). There were 62.51 sets with catch over objects and 11 over free schools.

Tables 3 and 4 show the catches and discards (in tons), respectively, per species and school type, obtained in each of the PNDB campaigns in the Indian Ocean, in 2003.

2,916 t (80 %) commercial catches were obtained over floating objects (in 51 sets, 82% positive sets) and 745 t (20%) over free schools (in 11 sets, 18% positive sets).

For catches made over free schools, the dominant species was the YFT (81%), followed by SKJ (18%) and 1% BET. As for retained catches obtained with FADs, the dominant species was the SKJ (61%), followed by the YFT (35%) and, finally, the BET (4%). Figure 1 gives the composition per species of the catches obtained over free schools and floating objects.

Figure 2 shows the specific composition of the discards in free schools and floating objects. Discards were practically null in catches over free schools (0.16% of the total catch), while they amounted to 4.7% of the total catch for floating objects.

Bibliography

IEO-AZTI-IRD, January 2003.- Manual for Observers embarked on tuna purse-seiners (National Base Data Plan/Plan Nacional de Obtención de Datos Básicos). Mimeo.

TRIP	BEGIN	END	Days at sea
INIEO0503	04/06/2003	22/06/2003	19
INIEO0903	04/09/2003	12/10/2003	39
INIEO1003	11/10/2003	11/11/2003	31
INIEO1203	19/12/2003	08/01/2004	21
TOTAL			110

Table 1.- Name of the campaign, date of beginning and end and duration of each of the campaigns performed by the IEO within the PNDB in the Indian Ocean, in 2003.

PNDB OI 2003 TRIP	Fishing grounds				SETS				
	Latitude		Longitude		Total	FADs	% +	Free School	% +
INIEO0503	00° 26' N	12° 16' S	56° 01' E	45° 36' E	5	2	100	3	33
INIEO0903	14° 56' N	04° 37' S	63° 58' E	45° 39' E	23	22	100	1	100
INIEO1003	10° 27' N	06° 52' S	57° 03' E	40° 44' E	32	24	96	8	50
INIEO1203	00° 00' N	08° 39' S	55° 36' E	40° 36' E	13	4	100	9	56

Table 2.- Extreme situations of the geographical area where each of the campaigns was performed (latitude and longitude), total number of sets and type of school, as well as percentage of positive sets per type of association.

Catches (t)	Free School							FADS							TOTAL CATCH
	YFT	SKJ	BET	ALB	FRI	LTA	Total	YFT	SKJ	BET	ALB	FRI	LTA	Total	
INIEO0503	20	0	0	0	0	0	20	8	57	13	0	0	0	78	98
INIEO0903	3	4	0	0	0	0	7	329	635	17	0	0	0	980	987
INIEO1003	446	127	2	0	0	0	575	631	1045	71	0	0	0	1747	2322
INIEO1203	138	5	0	0	0	0	143	62	43	6	0	0	0	111	254
TOTAL	607	136	2	0	0	0	745	1030	1780	107	0	0	0	2916	3661

Table 3.- Catches (in tons) per species and vessel type obtained in each of the PNDB campaigns in the Indian Ocean, in 2003.

Discards (t)	Free School							FADS							TOTAL CATCH
	YFT	SKJ	BET	ALB	FRI	LTA	Total	YFT	SKJ	BET	ALB	FRI	LTA	Total	
INIEO0503	0	0	0	0	0	0	0	0.02	0.02	0	0	0	0	0.05	0.05
INIEO0903	0.4	0.4	0	0	0.2	0	1	34.6	49.5	0	0	19	0	103	103.6
INIEO1003	0	0	0	0	0	0	0	9.3	14.6	3	0	15	0	41.5	41.5
INIEO1203	0	0	0	0	0.1	0.1	0.2	0	0	0	0	0	0.1	0.1	0.3
TOTAL	0.4	0.4	0	0	0.3	0.1	1.2	43.9	64.1	3	0	33	0.1	144	145.45

Table 4.- Discards (in tons) per species and type of school obtained in each of the PNDB campaigns in the Indian Ocean, in 2003.

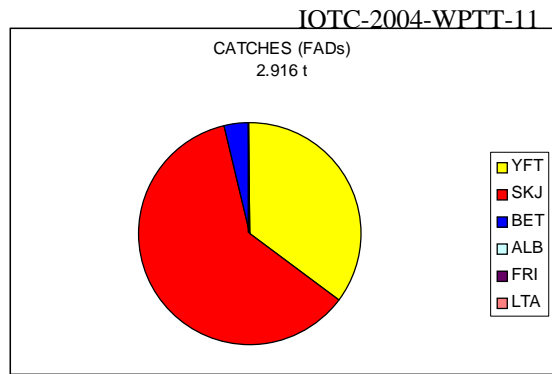
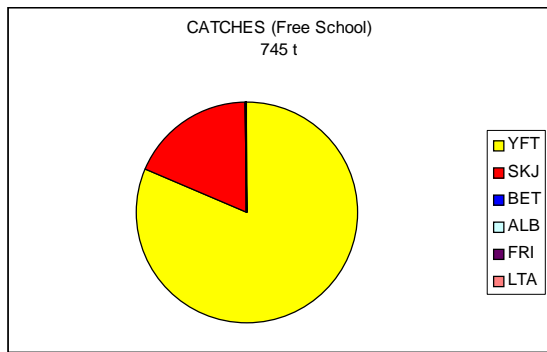


Figure 1.- Composition per species of the commercial catches obtained over free schools (left) and with FADs (right) in the PNDB campaigns in the Indian Ocean in 2003.

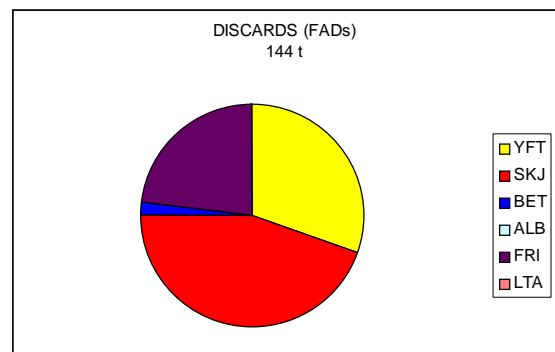
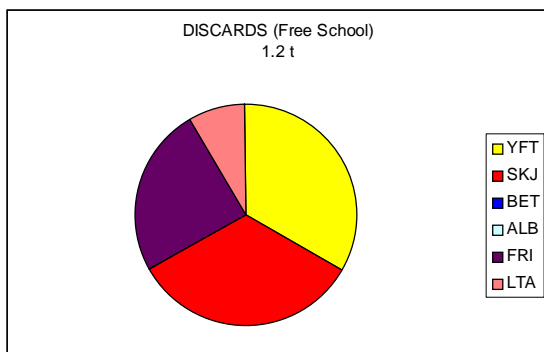


Figure 2.- Composition per species of the discards produced over free schools (left) and with FADs (right) in the PNDB campaigns in the Indian Ocean in 2003.