WCPFC-SC1 FR WP-16



Fisheries report of EU–Spain for the year 2004



Instituto Español de Oceanografía, Spain.

August 2005

FISHERIES REPORT OF EU-SPAIN FOR THE YEAR 2004.

by : Research Program on Tuna and Tuna-like especies. Instituto Español de Oceanografía¹

Purse seine activities.

The European purse seine fleet (EC-SPAIN) has been operating in waters of the Pacific Ocean since 1978 and particularly in the Western Pacific since 1999. The target species of this fleet are the tropical tuna: *Thunnus albacares* (YFT) and *Katsuwonus pelamis* (SKJ) which are captured in the WPO either in free-swimming schools or associated with floating objects, with a third species, *Thunnus obesus* (BET), appearing in the catches taken with Fish Aggregating Devices FAD.

Since 1998 the fleet has been made up of five large tuna purse seine vessels in the Pacific Ocean, whose fishing activity has been primarily carried out in the EPO (IATTC areas) although they have also operated taking some sporadic catches in the WPO since 1999. The total hold volume of these vessels is 11997 m³ (ranging from 1881 m³ to 3161 m³). Catches are held and frozen on board in salt vats.

The SPC has compiled statistical catch data on the Spanish fleet since 1999 reported directly by the owner's associations. The fishing logbooks filled out by the skippers (nominal catch per set type without making corrections for the species composition) are generally recorded by IATTC staff. At the present time, the final figures corresponding to the catches made by this fleet in the WPO in 2004 are unavailable. However, preliminary data for 2004 suggests nominal catches of around 5,517 t in total (YFT 1,196 t, BET 842 t and SKJ 3,479 t) in areas of the WCPFC made with purse seine gear. However the overlapping delimitation between both regional organizations in EPO and WPO areas and the unfitted regional delimitation with the FAO's boundaries, suggests a necessary further checking and clarifications. The catches are processed for canning, therefore the market is the EC-Spain or the international market of frozen tropical tuna.

At the present time there is no EC-Spain research program aimed at this fishery, which means that the samplings done to obtain data on species composition and size distributions of the catches must be carried out by staff from either the WCPFC or IATTC at the ports where the fish are unloaded or transferred if these landings take place at a port in the Eastern Pacific.

As regards the presence of on-board observer, these vessels have a coverage of 100% in keeping with the Agreement on the International Dolphin Conservation Program (AIDCP) managed by the IATTC. The observers continue their activity when changing from the EPO to the WPO-50% belonging to the AIDCP-IATTC program and 50% to the EC-Spain (PNOT) program. They record data according to the forms and methodology laid down by the IATTC.

During the Scientific Committee of the year 2005, two descriptive documents will be presented about the research activities on the EC-Spain purse seine fleet fishing in the West Indian Ocean, one about a project on tuna acoustic selectivity using ecosounder and sonar, on board Spanish purse seiners in the Indian Ocean, and other about a project on new FAD designs to avoid entanglement of by-catch species, mainly sea turtles, in the Spanish purse seine fishery in the Indian Ocean (see annex I). The final results will be presented at the next meeting of the WCPFC Scientific Committee.

¹ P.O. Box 130, 15080 A Coruña, Spain.

Surface longline fleet.

The Spanish surface longline fleet did not carry out any fishing activity in the western and central zones of the Pacific Ocean prior to 2004. During the first quarter of the year 2004 an experimental fishery activities began, targeting the swordfish with the surface longline gear in areas located between Melanesia, New Zealand and Australia. Five Spanish longline flag vessels were taking part in this experimental fishery starting from the port of Djakarta (Indonesia). The activity was carried out for a period of 240 days at sea per vessel and concluded in December 2004. The average characteristics of the vessels involved in this experimental fishery were 285 GTR, 810 HP and 40 m in length. They process the swordfish on board in dressed weight (eliminating the head, viscera and fins) and keep it frozen. The experimental fishing areas were located between 15°N - 40°S and 155°E - 140°W (figure 1). Additionally, in the last quarter of 2004 another experimental fishery action was also started in areas located mainly in the eastern Pacific. However, 3 of these vessels involved in this action carried out 44 sets in 3 of the 5°x5° squares within the WCPFC convention area (figure 1).

The gear used by these 8 vessels cited was the 'American style' (Florida style modified) surface longline, with an average of 1055 hooks per set. Over the course of these fishing activities, the overall catches held on board, in tons of round weight, taken by all 8 vessels fishing to the west of 130°W were: swordfish 692.5 t, blue shark 1291.4 t, shortfin mako 238.3 t, tunas 88.8 t, billfish 38.2 t and others species 1.2 t. The final destination of this catches are European markets for human consumption. The total nominal fishing effort exerted by these 8 vessels was 1,009,850 hooks set during a total of 952 fishing days or sets. The overall nominal CPUE or mean fishing yield in round weight per thousand hooks resulted in 685,8 kg of swordfish, 1278.8 kg of blue shark, 235.9 kg of shortfin mako, 87.9 kg of tunas, 37.8 kg of billfishes and 1.2 kg of other.

Additionally, during December of 2004 some commercial sets were done by one longliner with catches of 41.0 t of swordfish, 31.2 t of blue shark, 10.9 t of shortfin mako and 2.6 t of tunas.

Although there is no EC-Spain formal research program aimed at this longline fishery, the Spanish longline vessels activity into the WCPFC areas, the sampling and some research activities will be maintained as the same protocols used for other Pacific, Atlantic and Indian zones, upon staff and budget availability.

Opportunistic tagging and release activities were also carried out during both experimental activities. Around 400 different individuals were tagged and released: 148 swordfish, 145 shortfin mako, 11 blue shark, 47 Carcharhinus spp., 39 tunas and 19 billfishes. In addition biological samples were collected to be used in future studies on reproduction, sex ratios, genetic analyses, etc.



Figure 1. Fishing areas tested in 2004 (coloured 5°x5° squares) by 8 surface longline vessels of during two different experimental fishing surveys targeting swordfish.

Annex 1: List of document presented at the SC of 2005.

- Project on tuna acoustic selectivity using ecosounder and sonar, on board Spanish purse seiners in the Indian Ocean, by Alicia Delgado de Molina, Javier Ariz, Pilar Pallarés, Rosa Delgado de Molina and Santiago Déniz.

- Project on new FAD designs to avoid entanglement of by-catch species, mainly sea turtles, in the Spanish purse seine fishery in the Indian Ocean, by Javier Ariz, Alicia Delgado de Molina, Pilar Pallarés, Rosa Delgado de Molina and Santiago Déniz.