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联合国  
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Food  
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Organización  
de las  
Naciones  
Unidas  
para la  
Agricultura  
y la  
Alimentación

## COORDINATING WORKING PARTY ON FISHERY STATISTICS

**Nineteenth Session**

**Noumea, New Caledonia, 10-13 July 2001**

**AGENCY REPORT**

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## **AGENCY PROGRAMMES IN FISHERY STATISTICS: SECRETARIAT OF THE PACIFIC COMMUNITY**

### **Main Purpose and Usage of Statistics**

The Oceanic Fisheries Programme (OFP) of the Secretariat of the Pacific Community (SPC) is concerned with statistics and research on tuna fisheries in the central and western Pacific Ocean (Figure 1). The data compiled by the OFP are used primarily for monitoring trends in catch and effort, and for stock assessment and other research conducted by the OFP and by external scientists. The OFP Statistics Section publishes two statistical bulletins: the quarterly Tuna Fishery Bulletin, which presents catch rates for major fleets, and the Tuna Fishery Yearbook, which presents annual catch estimates for the western and central Pacific Ocean (WCPO).

### **Catch Data Structure**

The structure of data compiled by the OFP can be described as follows:

- Annual catch estimates for the WCPO are compiled by gear type, fishing nation, and major species of tuna and billfish, but not other bycatch species. The estimates are scientific estimates that are either provided by the fishing nation or determined from logsheet and landings data held by the OFP. Discards are included for the United States purse-seine fleet only. The fleets covered are generally industrial vessels; small-scale fisheries, including recreational, are currently being incorporated into the database.
- Operational-level catch and effort data (longline and purse-seine sets; pole-and-line and troll days fished) covering most industrial gear types and fishing nations in the WCPO are provided by SPC member countries and territories. Bycatch and discards are not usually covered.
- Catch and effort data grouped by time-area strata (5° latitude by 5° longitude and month for longline and troll; 1° latitude by 1° longitude and month for pole-and-line and purse seine) are provided by non-SPC member fishing nations (e.g. Japan, Korea and Taiwan).
- The OFP conducted two large-scale tagging programmes, from 1977 to 1980 and from 1989 to 1992, during which 317,412 skipjack, yellowfin and other species were tagged throughout the tropical and sub-tropical western and central Pacific from pole-and-line vessels. A total of 27,000 tags have been returned, giving an overall return rate of 8.5 percent. The OFP has not conducted a tagging programme since 1992, although tags continue to be returned.
- Landings data, and length and other sampling data, are collected through port sampling programmes in 23 ports in 12 SPC member countries and territories.
- Observer data, including data on bycatch and discards, and length data, are collected by OFP scientific observers and observer programmes in eight SPC member countries and territories.

### **Reporting Policy in Relation to Nationality of Catch**

Annual catches estimates published in the SPC Tuna Fishery Yearbook are allocated to fishing nations at the discretion of the OFP. That is, annual catch estimates for vessels under flags of convenience are included, but not reported separately.

Operational-level catch and effort data are available by either the flag of registration or the flag that is determined at the discretion of the OFP.

Catch and effort data grouped by time-area strata are available by either the flag of registration or the flag that is determined at the discretion of the OFP.

### **Observer Programmes**

Observer data covering longline (since 1987), pole-and-line (1998 only) and purse seine (since 1994) in the WCPO have been compiled by the OFP. Since the cessation of the European Commission-funded South Pacific Regional Tuna Resource Assessment and Monitoring Project (SPR TRAMP), which was active from 1995 to 2000, the OFP has not employed full-time observers. Observer data are currently compiled from national observer programmes in the Federated States of Micronesia, Papua New Guinea and Solomon Islands.

### **Vessel Monitoring Systems**

Vessel monitoring systems have been implemented in the South Pacific region by the South Pacific Forum Fisheries Agency (FFA), Honiara, Solomon Islands. FFA reported to the 48<sup>th</sup> meeting of the Forum Fisheries Committee, which was held from 7 to 11 May 2001 in the Cook Islands, that “there are currently 536 vessels in good standing on the FFA VMS Register. Despite encouraging recent increases in numbers of vessels in good standing on this register, mainly due to the signing of a memorandum of understanding between the FFA and four Japanese fishing associations, many fishing vessels in the region have not applied for good standing... A recent check of the FFA VMS Register indicates that... only 177 were actually providing position reports to the FFA VMS.”

The FFA VMS Register concerns vessels operating under access agreements with FFA member countries, whose EEZs account for only a portion of the WCPO. The OFP has estimated that there were 6,077 vessels (3,975 longliners, 1,480 pole-and-line vessels and 622 purse seiners) operating in the WCPO during 1999.

## **Agenda Item 6. Reports on Inter-Sessional Developments in Agency Programmes in Fishery Statistics**

### Compilation of annual catch estimates

- Annual catch estimates were previously compiled for the target species only, i.e. bigeye, skipjack, yellowfin and South Pacific albacore. The compilation of annual catch estimates for billfish commenced in 2000 and the compilation of information on catches of species of special interest, such as sharks, marine reptiles, marine mammals and birds, commenced in 2001.
- Catches in recreational and subsistence fisheries in the WCPO are small and annual catch estimates have not previously been compiled. Compilation of annual catch estimates for small-scale fisheries commenced in 2001. It is hoped that the FAO Pacific Islands Fisheries Statistics Workshop, which may be held from 16 to 18 July 2001 in Noumea, will facilitate the compilation of catch data for small-scale fisheries.
- Compilation of annual catch estimates from Indonesia and the Philippines, which represent about 20 percent of the catch of major species in the WCPO, continues to be problematic.

### Compilation and processing of operational-level catch and effort data from SPC members

- The catch and effort logsheet database currently covers 2.16 million fishing operations by over 11 thousand fishing vessels, dating from 1970 to 2001. The logsheet data cover primarily tuna and billfish.

### Compilation of catch and effort data grouped by time-area strata from non-SPC members

- Catch and effort data stratified by time-area continue to be provided for the Japanese longline, pole-and-line and purse-seine fleets; the Korean longline fleet; and the Taiwanese distant-water longline fleet.

### Collection of tagging and associated data

- A project to test the feasibility of tagging albacore from small longliners operating in Samoa was conducted in September 2000. The results, however, were not encouraging. Only 59 albacore, 3 yellowfin and 9 bigeye was tagged from six sets.

### Port sampling programmes

- The OFP continues to compile port sampling data collected by national programmes. Port sampling forms were modified by the SPC/FFA Tuna Fishery Data Collection Committee at its December 2000 meeting.

### Observer programmes

- The OFP continues to compile observer data, including data on bycatch and discards and length data, collected by national observer programmes. The activities of four SPC observers ceased in 1999, when the European Commission-funded SPRTRAMP project terminated. Observer data collection forms were modified by the SPC/FFA Tuna Fishery Data Collection Committee at its December 2000 meeting. Coverage by observer programmes in the WCPO continues to be extremely low. Coverage of longliners was 0.15 percent in 1999, while the coverage of purse seiners was 4.15 percent.

### SPC Regional Tuna Bulletin and SPC Tuna Fishery Yearbook

- The Regional Tuna Bulletin and Tuna Fishery Yearbook are available on the SPC website at <http://www.spc.int/oceanfish/docs/index.htm>. The annual catch estimates that are published in the Yearbook are now available on the SPC website in Fishstat Plus format.

### National fishery database systems

- The OFP continues to provide technical support for fishery database systems in SPC member countries and territories. During 2000, a new fishery database was established in Vanuatu.

### Releases of data and responses to requests for tuna fishery statistics

- The OFP responded to 14 requests for data and 75 requests for other information in 1999 and to 11 requests for data and 47 requests for other information in 2000.

**Agenda Item 8. Elasmobranch Statistics**

The OFP does not currently compile annual catch estimates for elasmobranchs. However, the Billfish and Bycatch Research Group of the Standing Committee on Tuna and Billfish (SCTB) will consider the state of information available on elasmobranchs catches in the WCPO at the 14<sup>th</sup> meeting of SCTB, which will be held at SPC headquarters from 9 to 16 August 2001.

Observer data that can be used to estimate elasmobranch catch rates have been compiled by the OFP for longline and purse seine. However, the coverage rates for 1999 are less than 0.15 percent for longline and 4.15 percent for purse seine.

Catch and effort logsheets that are currently used in the region do not allow the collection of elasmobranch catch data by species due to lack of space. The SPC/FFA Data Collection Committee agreed at its December 2000 to develop prototype logbooks (rather than logsheets) for longline and purse seine that will contain detailed information on bycatches, including sharks and rays.

**Agenda Item 9. Data Implications of Illegal, Unreported and Unregulated (IUU) Fishing (and Agency Catch Certification Schemes)**

Following an informal meeting of the tuna agencies (FFA, IATTC, IOTC, SPC) in July 2000, during which it was agreed to exchange information on vessel registries in an effort to deal with IUU fishing, SPC and the Forum Fisheries Agency (FFA) distributed a list of tuna vessels in the region that are covered by (1) catch and effort logsheets, landings data, port sampling data or observer data held by SPC; (2) the FFA Regional Register; and (3) the FFA Violations and Prosecutions (VAP) Database.

**Agenda Item 10. Discard Data Availability and Dissemination**

Information on discarding is available from observer data compiled by the OFP. Tables 1 and 2 present discard rates, by species group, for longline (1987–2000) and purse seine (1994–2000) in the western and central Pacific Ocean.

**Table 1. Percentage of observed longline take (number of individuals) retained or discarded in the WCPO.** Sharks whose fins were retained, but trunks discarded, were considered to have been discarded.

SPECIES GROUP	RETAINED		DISCARDED		UNKNOWN		TOTAL
	N	%	N	%	N	%	N
TUNA	234,220	89.3	24,648	9.4	3,372	1.3	262,240
TUNA-LIKE SPECIES	6,368	85.3	887	11.9	211	2.8	7,466
BILLFISH	16,510	85.8	2,477	12.9	266	1.4	19,253
SHARKS AND RAYS	19,010	13.2	91,686	63.8	32,974	23.0	143,670
OTHER FISH	14,963	21.3	40,088	57.0	15,320	21.8	70,371
CEPHALOPODS	0	0.0	5	100.0	0	0.0	5
MARINE REPTILES	4	3.6	108	96.4	0	0.0	112
BIRDS	20	1.4	1,444	98.6	0	0.0	1,464
MARINE MAMMALS	20	5.8	320	93.6	2	0.6	342
UNSPECIFIED	498	10.9	3,296	72.1	777	17.0	4,571
TOTAL	291,613	57.2	164,959	32.4	52,922	10.4	509,494

**Table 2. Percentage of observed purse-seine take (tonnes or numbers of individuals) retained or discarded in the WCPO**

SPECIES GROUP	RETAINED		DISCARDED		TOTAL
	T	%	T	%	T
TUNA	253,514.544	95.9	10,945.800	4.1	264,460.344
TUNA-LIKE SPECIES	17.801	13.8	110.830	86.2	128.631
BILLFISH	36.933	32.3	77.349	67.7	114.282
SHARKS AND RAYS	19.057	3.7	498.948	96.3	518.005
OTHER FISH	129.448	11.3	1,015.028	88.7	1,144.476
UNSPECIFIED	5.644	4.7	115.401	95.3	121.045
TOTAL	253,723.427	95.2	12,763.356	4.8	266,486.783

SPECIES GROUP	RETAINED		DISCARDED		TOTAL
	N	%	N	%	N
CEPHALOPODS	4	50.0	4	50.0	8
MARINE REPTILES	0	0.0	28	100.0	28
MARINE MAMMALS	0	0.0	127	100.0	127

**Agenda Item 11. Integration of Fishery Statistics and Joint Dissemination**

Annual catch estimates for albacore, bigeye, skipjack and yellowfin tuna for the western and central Pacific Ocean (SPC), the eastern Pacific Ocean (IATTC), the Indian Ocean (IOTC) and the Atlantic Ocean (ICCAT), for all gears and fishing nations combined, are published in the SPC Tuna Fishery Yearbook.

**Agenda Item 12. Charging and Dissemination Policies for Supply of Data**

Catch and effort data grouped by 5° latitude, 5° longitude and month, for longline, pole-and-line, purse seine and troll are available from the OFP website. Catch and effort data at finer levels of aggregation are available from the OFP with authorisation from the sources of the data.

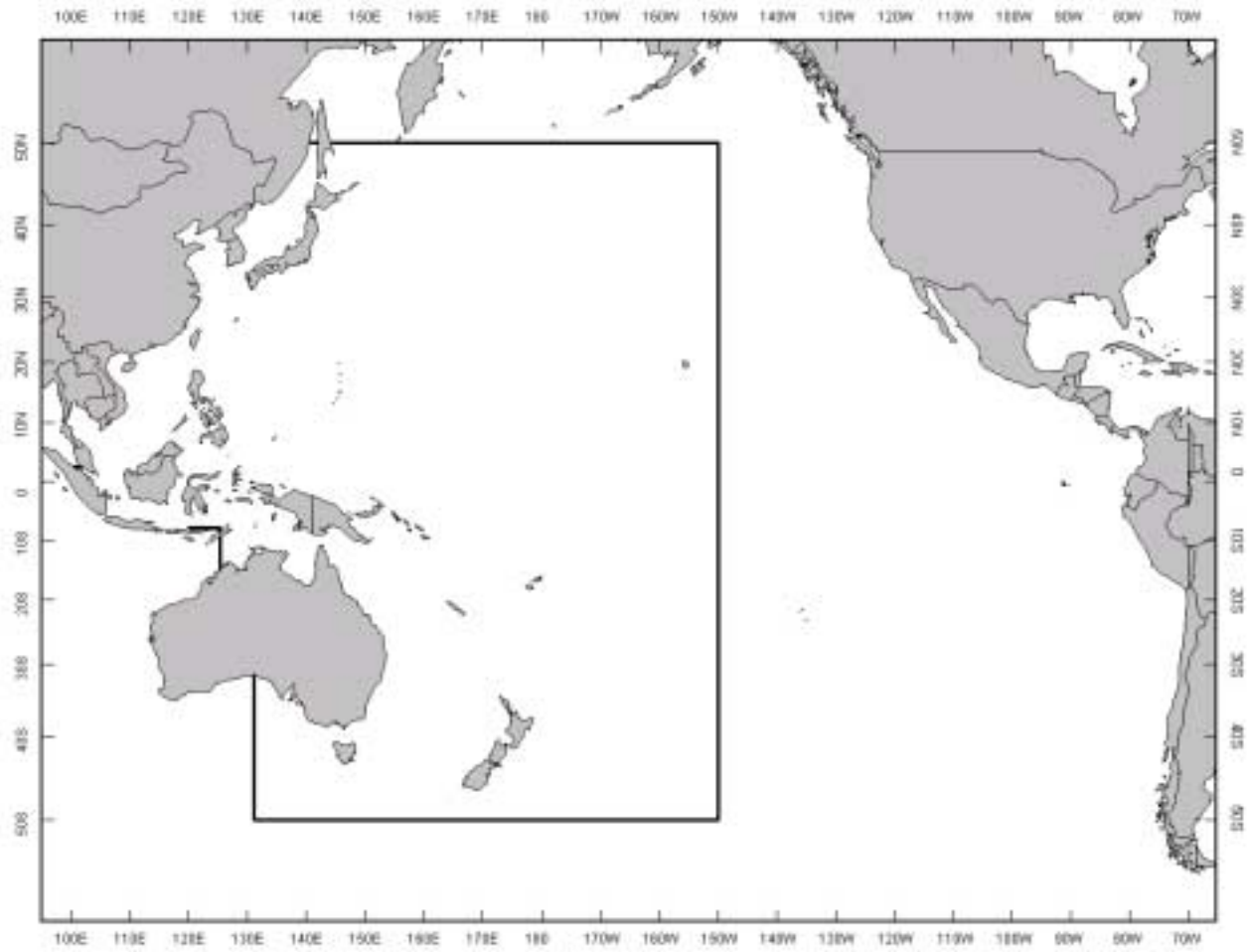
The OFP does not charge for the supply of data; however, small charges to cover processing and mailing may be charged for hardcopy statistical bulletins.

**Agenda Item 13. Record of Vessels Fishing on the High Seas.**

Information concerning vessels fishing on the high seas in the SPC region is available from logsheet data compiled by the OFP. Coverage of purse-seine fleets on the high seas is generally high, except for the Japanese purse-seine fleet, whereas coverage of longline and pole-and-line fleets on the high seas is low.

**Agenda Item 17. Handbook on Fishery Statistics – Completion and Revisions**

The offer of OFP assistance in completing and revising the Handbook on Fishery Statistics, at the request of FAO, still stands.



**Figure 1. Western and Central Pacific Ocean**