

■ OCEANIC FISHERIES PROGRAMME

Scientific Committee meeting of the Western and Central Pacific Fisheries Commission

One of the most important meetings for SPC's Oceanic Fisheries Programme (OFP) and SPC member countries and territories is the yearly Scientific Committee (SC) meeting of the Western and Central Pacific Fisheries Commission (WCPFC). The SC reviews the current state of scientific knowledge, and sends recommendations and advice to WCPFC, which manages the world's largest and most valuable fishery.

In its role as the science provider to WCPFC, OFP provides stock assessments, fishery statistics and other scientific work. Before and during each meeting of the SC, OFP also gives scientific support to SPC member countries and territories.

This year, the fifth meeting of the SC was held in Port Vila, Vanuatu, from 10–21 August (see Fig. 1). OFP provided the majority of the science with over 40 papers, including a review of fisheries; stock assessments for yellowfin, bigeye and albacore tuna; an evaluation of current management measures; and a review of progress in the regional tuna tagging project. A brief summary of these presentations is presented here. The meeting's summary report and meeting papers can be found at <http://www.wcpfc.int/meetings/2009/5th-regular-session-0>.

FISHERIES REVIEW

In 2008, the tuna catch in the western and central Pacific was the highest ever recorded, at 2.4 million mt, which represents 56% of the global tuna catch. The yellowfin catch was also a record, with bigeye and skipjack the second highest ever. The albacore catch, however, was the lowest it has been for more than 10 years. The largest part of the catch was skipjack

caught by the purse-seine fishery (Fig. 2).

STOCK ASSESSMENTS AND MANAGEMENT ADVICE

The 2009 bigeye tuna assessment, presented by Shelton Harley (head of the SC's Stock Assessment Specialist Working Group), indicated that overfishing was occurring (i.e. fishing mortality was above F_{MSY}^1), and that the stock was either slightly overfished or soon would be (i.e. spawning biomass was close to or below SB_{MSY}^2). Overall, the 2009 assessment was more pessimistic than the 2008 assessment, following which a 30% reduction in fishing mortality was recommended by the SC. In addition, the evaluation of the existing WCPFC management measure for bigeye and yellowfin tuna, presented by OFP's manager John Hampton, indicated that it fell well short of achieving its aim of reducing bigeye fishing mortality by 30% from 2001–2004 average levels. As a result, the SC recommended that more should be done to reduce fishing mortality on big-

eye, and ensure that the fishery is sustainable for the long term.

Results of the 2009 yellowfin stock assessment, presented by OFP consultant Adam Langley, were more optimistic than the 2007 assessment. Overfishing was not occurring on the stock as a whole, and the stock was not overfished. However, there were concerns about the high fishing impact on the western equatorial region, which supplies 95% of the catch. The SC recommended that fishing mortality on yellowfin in this region should not increase.

Results of the 2009 albacore assessment, presented by OFP's Senior Fisheries Scientist Simon Hoyle, indicated that the stock was not in an overfished state, and not being overfished. However, current levels of fishing appear to be affecting longline catch rates, which may have economic implications for Pacific Island countries that target this species.

OTHER MATTERS

From SPC-OFP's perspective, an excellent outcome of the



Figure 1. The fifth meeting of the WCPFC Scientific Committee in Port Vila, Vanuatu. The SC's Chair, Dr Naozumi Miyabe (right), and Vice-Chair Dr Keith Bigelow (left), lead the meeting.

meeting was the nomination of a new Vice-Chair of the SC, Pamela Maru of Cook Islands. Pam, the first Pacific Islander in a leadership position in a regional fishery management organisation, has attended OFP's stock assessment training workshops for the last four years to increase her understanding of the science that underlies fishery management. We wish her well in her new role.

Many issues were covered at the SC meeting, with the most important summarised below. Working papers are available from the WCPFC website.

- i. A review of the fisheries in the western and central Pacific Ocean and eastern Pacific Ocean;
- ii. A review of the stock status of yellowfin, South Pacific albacore and bigeye tuna (the latter based on a streamlined assessment), with a focus on requests for advice and recommendations arising from the Fifth Regular Session of the WCPFC at Busan, Korea in December 2008;
- iii. An appraisal of Conservation and Management Measure 2008-01 with respect to the potential for

- achieving the measure's objectives;
- iv. A summary of the most recent information and assessments for tuna and billfish stocks in the North Pacific;
- v. A dedicated session of the SC's Methods Working Group to discuss biological reference points against which WCPFC assesses stock status;
- vi. Bycatch mitigation issues associated with seabirds, sea turtles, sharks, juvenile bigeye and yellowfin tunas;
- vii. Issues associated with the data available to WCPFC and initiatives to address data gaps;
- viii. A review of the advice and recommendations arising from the Independent Review of the Commission's Transitional Science Structure and Functions;
- ix. The status of the Indonesia and Philippines Data Collection Project (IPDCP)/West Pacific East Asia Oceanic Fisheries Management Project (WPEA), the Japan Trust Fund (JTF) and the Pacific Tuna Tagging Project (PTTP);
- x. Relations with other organisations;
- xi. Special requirements of small island developing States and territories;
- xii. The process for developing the SC's work programme and the 2010–2012 work programme and budget; and
- xiii. Administrative matters associated with the functioning of the SC, streamlining the operations of the SC and reviewing WCPFC's Research Plan.

The next SC meeting will be held in Tonga in August 2010.

¹ F_{MSY} = The fishing mortality rate that would, in theory, give the maximum sustainable yield (MSY) from a particular stock year after year. MSY is the average or maximum catch that can be removed under existing environmental conditions over an indefinite period without causing the stock to be depleted, assuming that removals and natural mortality are balanced by stable recruitment and growth.

² SB_{MSY} = The reproductive output by sexually mature female fish in a population (also known as the "reproductive potential") needed, in theory, for a population to provide MSY year after year.

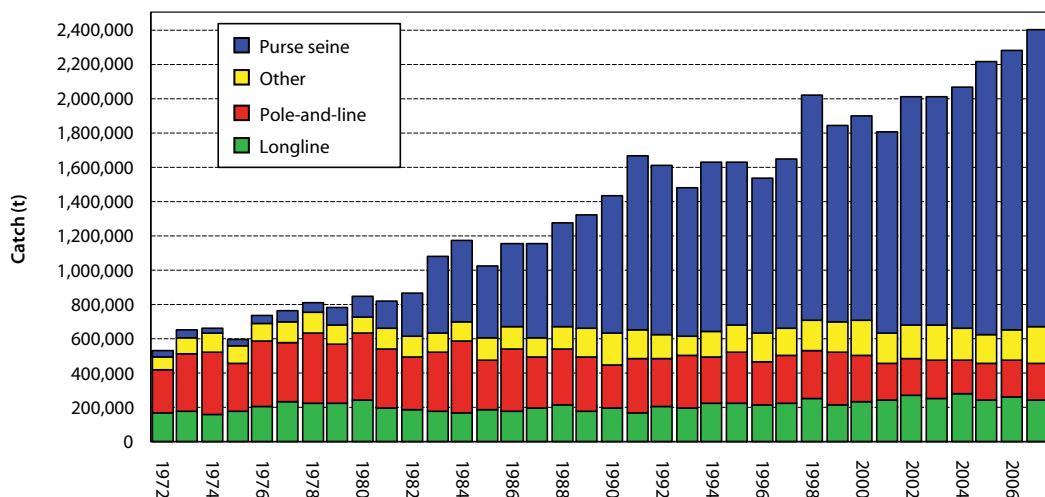


Figure 2. Total 2008 catch of tuna (albacore, bigeye, skipjack and yellowfin) in the western and central Pacific Ocean by longline, pole-and-line, purse-seine and other gear types.