

### 3<sup>rd</sup> Meeting of the Scientific Committee

Port Vila, Vanuatu  
28 September - 3 October 2015

#### SC-03-JM-02

#### *Trachurus murphyi* catch history and predicted 2015 catches Secretariat

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### Summary paragraph

The Secretariat provided an updated historical catch data series to 2014 as well as an initial estimate of 2015 catches for use in the assessment (Annex 1). Changes to previous versions for this data series are limited to the 2014 final figures as advised by Members and CNCPs. 2015 initial estimates were created by applying the mean observed difference, by fleet, between the provisional 2010-14 figures and the final 2010-14 figures, to the available 2015 monthly catches. The initial 2015 estimates may be adjusted during SC-03 based on participant's knowledge of current fishing conditions.

This paper also provides a short explanation of the *Trachurus murphyi* (CJM) catch history as used in the SPRFMO CJM stock assessment.

### Annual catch totals

Historic catch data for the years prior to 2007 were initially provided to the (Interim) SPRFMO Secretariat under the [2007 interim data standards](#). As a result, the SPRFMO Secretariat holds catch data for all major fish species (including CJM) caught in the SPRFMO Area, in many cases reaching back to the 1970's<sup>1</sup>. The data standards were later revised and the term "annual catch total" was introduced in the [2012 interim data standards](#). This term persists in the current [Conservation and Management Measure 3.02](#) (data standards).

Members and CNCPs provide annual catch totals raised to 'live' weight for all species caught during the previous calendar year. A summary of this information was first published in 2008 ([SPRFMO-V-SWG-10](#)) and is [updated annually](#).

Annual catch totals are used to create the historic catch data series for the CJM stock assessment up to and including 2013. The 2014 annual catch totals are due 30 September 2015 (during the SC-03 meeting); thus, preliminary 2014 figures (from monthly catches) are used as a placeholder in Annex 1.

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<sup>1</sup> The earliest CJM catch record is from 1939.

## Monthly catch reports

[CMM 3.01](#) (*Trachurus murphyi*) requires Members and CNCPs to report monthly catches to the Secretariat within 20 days. At the time of the SC-03 meeting the Secretariat expects to have access to catch reports for the first 8 months of 2015 (Jan – Aug). This is similar to previous years where information for the first 8 or 9 months was available. Annex 1 currently shows data up to, and including, July and will be updated during SC-03.

The monthly catch reports are used to estimate the annual CJM catch for the current year. Monthly catch figures have been available since 2010, and show that catches are often reduced during the last 3 calendar months. For each year since 2010, the Secretariat has calculated the ratio between the (provisional) catches, available during previous meetings, and the (final) catch totals reported for the full year. The average ratio between these provisional and final figures is used to create initial catch estimates for 2015.

The initial estimates derived as described above may be adjusted during the meeting based upon *inter alia* knowledge of the current fishing conditions and/or TAC availability.

## Fleets used in the assessment

The Joint Jack Mackerel model (JJM) used by the SC to assess Jack mackerel stocks, recognises four distinct fleets. Fleet 1 is a coastal purse seine fishery in northern Chile. Fleet 2 is a purse seine fishery in central-south Chile that extends into the high seas. Fleet 3 combines the far-north coastal purse seine fisheries occurring in the EEZ's and Territorial waters of Ecuador and Peru. Finally, Fleet 4 corresponds to the offshore trawl fleet operating solely in the SPRFMO Area.

Data submitted to the Secretariat can be assigned to the correct Fleet in most cases. A notable exception occurs in Fleets 1 and 2 (northern and central-south Chile). This is because while the Secretariat has an estimate for the total Chilean catch it can only be split into the High seas and EEZ portions and not into northern and central-south portions. At previous SC meetings Chile has provided those estimates.

## Annex 1

An excel workbook is annexed to this paper (Annex 1).

Tab 1 contains the annual catch totals CJM by Member and CNCP and is structured by Fleet. There are various notes that reflect previous decisions taken by the SC with regard to this data series. Underlined figures have been updated since last assessment (refer to table A4.1 of the [SC-02 report; Annex 4](#)). Tab 2 shows the calculations for the initial 2015 catch estimates based upon monthly catch reports (*will be updated during the meeting*).