

**The Commission for the Conservation and Management of**

**Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Scientific Committee**

**Southern Hemisphere Porbeagle Shark (*Lamna nasus*)**

Stock Status AND Management Advice

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# **SC14, 2018 – SC15, 2019 (NO STOCK ASSESSMENTS)**

1. **Stock status and trends**
2. SC15 noted that no stock assessments were conducted for southern porbeagle shark in 2019. Therefore, the stock status descriptions from SC13 are still current for southern porbeagle shark. For further information on the stock status and trends from SC13, please see <https://www.wcpfc.int/node/29904>. Updated information on catches was not compiled for and reviewed by SC15.
3. Management advice and implications
4. SC15 noted that no management advice has been provided since SC13 for southern porbeagle shark. Therefore, previous advice should be maintained, pending a new assessment or other new information. For further information on the management advice and implications from SC13, please see <https://www.wcpfc.int/node/29904>.

# **SC13 2017 (Stock Status Assessment CONDUCTED)**

1. **Stock status and trends**
2. SC13 noted that although the stock status of the species is currently unknown the results of the assessment show that fishing mortality on the Southern Hemisphere stock is very low, and that it decreases eastward from the waters off South Africa to the waters off New Zealand. In the assessment area (Eastern Atlantic to Western Pacific Ocean) in the last decade (2005 to 2014), median F values ranged from 0.0008 to 0.0015 (mean 0.0010). This fishing mortality was less than 9% of the MIST based on *r* in all years assessed (1992-2014) and fell to half that level in more recent years (Figure POR-1), with at most a 3% probability of exceeding the MIST based on *r* in 2010-2014 (Figure POR-2). For the same scenarios, fishing mortality is less than 12% of the MIST based on 0.75*r* and less than 18% of the MIST based on 0.5*r*.
3. These scenarios are based on 100% capture mortality, and assuming that some porbeagles survive their encounter with the fishery would reduce the estimated risk levels even further.

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| **Figure POR-1.** F-ratio plots showing the median values of F / MIST by year, for the three versions of the MIST (Fmsm, Flim, and Fcrash) for each of the three regions and for the three regions combined (the assessment area). Note that the F-ratio is almost always below 1, indicated by the horizontal dotted line. | **Figure POR-2.** Risk plots showing the probability that F exceeds the MIST by year, for the three versions of the MIST (Fcrash, Flim, and Fcrash) for each of the three regions and for the three regions combined (the assessment area). |

1. **Management advice and implications**
2. SC13 advises WCPFC14 that although the stock status of the species is currently unknown there is a very low risk that the Southern Hemisphere porbeagle shark is subject to overfishing anywhere within its range.
3. SC13 recommends that WCPFC14 request the Common Oceans (ABNJ) Tuna Project to explore options for data improvements through liaison with other regional fishery bodies managing fisheries catching Southern Hemisphere porbeagle shark.

# **Useful References**

WCPFC-SC13-SA-WP-12 Southern Hemisphere porbeagle shark (Lamna nasus) stock status assessment Rev 2 (6 December 2017). <https://www.wcpfc.int/node/29525>

WCPFC-SC13-SA-IP-13 Updated abundance indicators for New Zealand blue, porbeagle and shortfin mako sharks. <https://www.wcpfc.int/node/29537>

WCPFC-SC13-SA-IP-14 Aspects of porbeagle shark bycatch in the Argentinean surimi fleet operating in the Southwestern Atlantic Ocean (50 – 57º S) during 2006-2014. <https://www.wcpfc.int/node/29538>

WCPFC-SC13-SA-IP-15 Development of Southern Hemisphere porbeagle shark stock abundance indicators using Japanese commercial and survey data. <https://www.wcpfc.int/node/29539>

WCPFC-SC13-SA-IP-16 Recalculation of historical landings of porbeagle shark.

<https://www.wcpfc.int/node/29540>

WCPFC-SC13-SA-IP-17 Population indicators for porbeagle sharks in the Chilean swordfish fishery.

<https://www.wcpfc.int/node/29541>

WCPFC-SC13-SA-IP-18 Standardized CPUE of porbeagle shark (Lamna nasus) caught by the Uruguayan pelagic longline fleet in the Southwestern Atlantic Ocean (1982-2012). <https://www.wcpfc.int/node/29542>