



**COMMISSION  
THIRTEENTH REGULAR SESSION**  
Denarau Island, Fiji  
5 – 9 December, 2016

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**SP-ALB TRP CMM: AIMING FOR ECONOMIC SUCCESS**

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**WCPFC13-2016-OP04  
9 November 2016**

**Paper by The World Wide Fund for Nature (WWF)**

**ENGLISH & CHINESE VERSIONS**



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FACTSHEET

2016

## GLOBAL MARINE PROGRAMME

### SP-ALB TRP CMM: AIMING FOR ECONOMIC SUCCESS

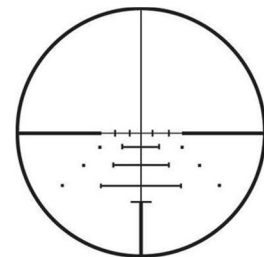
Justifying support for the Pacific Islands Forum Fisheries Agency (FFA) proposal for a Target Reference Point (TRP) Conservation and Management Measure (CMM) for South Pacific albacore (SP-ALB) in the Western and Central Pacific Ocean (WCPO).

#### What is a Target Reference Point?

A TRP is defined by single (or small set) of measurable fishery indicators such as fishing mortality rate, yield, or stock biomass that are used to judge if the current state of the fishery is desirable.

A TRP incorporates biological, ecological, social, and economic considerations. It should never be lower than the Limit Reference Point (LRP) and should be sufficiently higher to ensure managers have a buffer to account for information that is uncertain.

A TRP is often expressed as a percentage of a measurable fishery indicator. In this case, it is proposed as forty five per cent (45% or 0.45) of the estimated recent average spawning biomass (SB) that would have been available if there had been no fishing at all ( $F=0$ ), or  $0.45SB_{F=0}$ .



$0.45SB_{F=0}$

#### Why use a Target Reference Point?



Despite measures to cap or reduce it over the past decade, longline effort and fishing mortality have increased and the SP-ALB biomass has declined leading to greatly reduced catch per unit effort (CPUE) and reduced profitability of the longline fishery. Therefore, previous measures have proven ineffective and additional measures are necessary.

The adoption of a TRP represents a critical step in maintaining the health and sustainability of the SP-ALB stock, and, in turn, the commercial fisheries and shore-based processing plants that depend on it, by setting a benchmark by which to measure success. A central goal of this effort is to bring the SP-ALB stock back to a level consistent with successful biological and economic conditions experienced during the 2007-2008 fishing season.

## Key Element of the Proposed SP-ALB TRP CMM

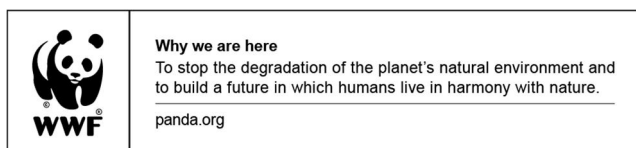
The Western and Central Pacific Fisheries Commission (WCPFC) adopts a TRP of 45 per cent of the estimated recent average spawning biomass in the absence of fishing ( $0.45SB_{F=0}$ ) for SP-ALB.

## Top 10 Reasons Why You Should Support the SP-ALB TRP CMM

1. It is consistent with the UN Fish Stocks Agreement and the WCPFC Convention by which all members are bound.
2. It has been exhaustively researched and analysed by the Secretariat of the Pacific Community (SPC).
3. It is necessary to achieve a specific condition under all SP-ALB Marine Stewardship Council (MSC) Certifications.
4. It is consistent with successful biological and economic conditions of the fishery in 2007-2008 when all fleets were operating successfully.
5. It is conservative, responsible, and precautionary, as it should be for an important stock that is considered essential to many members.
6. It securely ensures sustainability of the stock because it is set to achieve a biomass sufficiently higher than the LRP as well as that needed to support the Maximum Sustainable Yield (MSY).
7. It is consistent with the prior action of the WCPFC to set a TRP according to biological, social, and economic factors in the WCPO skipjack tuna purse seine fishery.
8. It constitutes a necessary component of an effective Harvest Strategy, is consistent with the timeline presented in the WCPFC Harvest Strategy Policy, and the TRP will form a basis for further management measures under the Tokelau Arrangement.
9. It provides an important step in avoiding additional impacts on other stocks affected by fisheries targeting SP-ALB, especially bigeye and yellowfin tuna.
10. The level of catch associated with the TRP will eventually achieve *stability* in the fishery by returning catch and effort levels to a time at which all fleets were operating profitably.



**WARNING:** As a simple *indicator* associated with an agreed management objective, a TRP alone does not ensure the target will be met! Strong monitoring, control, and surveillance mechanisms must be in place to not only properly implement management measures and ensure compliance, but also to ensure that the appropriate information is collected and incorporated into stock assessments. You cannot know if you are achieving the target (*i.e.*, your objectives) if you do not have the information to indicate where the stock level is in relation to the TRP.



### For more information

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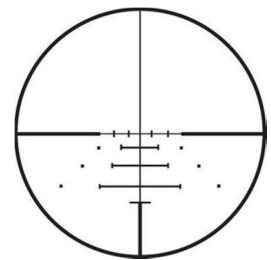
## 智慧渔业

南太平洋长鳍金枪鱼( SP-ALB )，“目标参考点”( TRP )保护管理方法( CMM )：  
渔捞效益的有效保障

支持“太平洋岛国渔业管理论坛社”( FFA )关于在中西太平洋对长鳍金枪鱼南太平洋种群实施“目标参考点”保护管理措施的提案建议。

### 什么是“目标参考点”( TRP )？

“目标参考点”( Target Reference Point 是指使用单一或一组可衡量的渔业指标，如死亡率、产量、生物量等，用于判断当前的渔业生产水平是否合理。



“目标参考点”综合考虑生物学、生态学和社会经济因素，其应永远高于限制参考点( Limit Reference Point , LRP) ，并保证在 LRP 要求之上有足够的资源调控空间，使管理者机会来应对资源管理过程中的不确定性因素。

$0.45SB_{F=0}$



“目标参考点”常被表达为一种可计量渔业指标的百分比。在右侧示例中，“目标参考点”是指在无渔业生产的情况下（ $F=0$ ），预计有 45% 或 0.45 的产卵群体生物量可被利用。

## 为什么要应用“目标参考点”

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尽管过去一直在采取措施控制延绳钓渔业方式，但延绳钓捕捞努力量和捕捞死亡率一直在增长，南太平洋长鳍金枪鱼的生物量因此不断下降，导致单位捕捞努力量下降及延绳钓渔业的利润减少。这说明，现有的管理措施没有效果，应予改进。

在南太平洋长鳍金枪鱼捕捞生产中应用“目标参考点”，通过设定一个标准，用以测算经济效益，这是保持鱼类种群及与之相关的捕捞业、加工业，健康可持续发展的一个重要环节。这样做的一个重要目的是使南太平洋长鳍金枪鱼种群得到恢复，使能达到 2007-2008 捕捞年度时的生物量和经济利用水平。

## 提案的重要背景

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中西太平洋渔业委员会（WCPFC）假设在无渔业生产的情况下，对南太平洋长鳍金枪鱼的产卵群体生物量进行了估算，并将其生物量的 45% 设定为南太平洋长鳍金枪鱼渔业的“目标参考点”（ $0.45SB_{F=0}$ ）。

## 支持提案的十大理由

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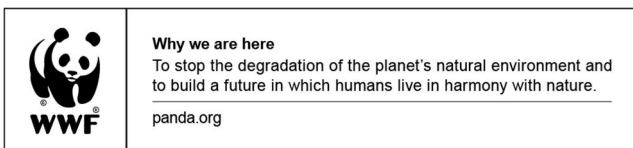
1. 符合《联合国鱼群协定》（UN Fish Stocks Agreement）及中西太平洋渔业委员会（WCPFC）协议相关管理内容要求。



2. 太平洋共同体秘书处 ( Secretariat of the Pacific Community , SPC)已组织开展了充分的研究分析。
3. 非常有必要在海洋管理委员会(Marine Stewardship Council, MSC)资格管理条件下，针对南太平洋长鳍金枪鱼增设特别条件。
4. 只有对所有船队进行有效管理，才能使渔业具备 2007-2008 年提出的生物学和经济学基础条件。
5. 对一个各成员国均认可其重要性的鱼类种群来说，这是一个谨慎的、负责的且具远瞻性的管理措施。
6. 这个管理措施可以使得种群生物量高于限制参考点 ( Limit Reference Point ，LRP)，并支持最大可持续产量 ( Maximum Sustainable Yield ，MSY )，因此可以保证种群的可持续利用。
7. 依据生物学、社会学及经济因素对中西太平洋鲣鱼和金枪鱼围网渔业设定“目标参考点”，符合中西太平洋渔业委员会 ( WCPFC ) 的优先行动项目内容。
8. 作为渔获有效管理策略的一个重要组成部分，“目标参考点”管理方法与 WCPFC 渔获管理政策 ( Harvest Strategy Policy ) 中的规划时间进度一致，并将成为南太平洋延绳钓渔业管理托克劳群岛协议所涉管理内容的技术支持。
9. 作为一个管理方法，其可以帮助缓和南太平洋长鳍金枪鱼渔业过程中对它其它鱼类种群特别是大眼金枪鱼和黄鳍金枪鱼的影响。

10. 在“目标参考点”的参考作用下，捕捞规模最终可以在回捕渔船数量和捕捞努力水平上达到稳定，这将使参与捕捞的船队均能获利。

**特别说明：**“目标参考点”仅仅是一个与管理目标相关联的指标，仅依据该指标，并不能保证管理目标得到实现。强有力的监测、管控和监督机制的建立和实施，不仅能保证管理措施的落实和遵守，同时也能保证相关信息的采集、整合和被用于种群评估。如果没有资源种群数据，不了解这些数据与“目标参考点”的关系，你无法判断管理目标是否已经实现。



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