



Ministry of Marine Resources  
GOVERNMENT OF THE COOK ISLANDS

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Hon. Mark Brown  
Chairman  
Purse Seine Select Committee  
Parliament Building  
NIKAO

Po Box 85, Avarua,  
Rarotonga, Cook Islands  
P +(682) 28721  
F +(682) 29721  
E rar@mmr.gov.ck  
www.mmr.gov.ck



30<sup>th</sup> August 2016

**Re: Questions raised by Hon. Tamaiva Tuavera**

Kia Orana Minister,

I refer to the letter from the above committee member addressed to yourself dated 25<sup>th</sup> August.

Several questions were raised which you have requested my assistance in responding. The questions (our interpretation in italics) and answers are as follows:

1. *Catch for 2014 and 2015, to show how much big eye tuna and other by-catch was caught by purse seiners in Cook Islands waters with FADs and without FADs*

The table below indicates the catch composition of key tuna species (skipjack, yellowfin and bigeye) and other species from 2012-2014 between FAD and non-FAD sets.

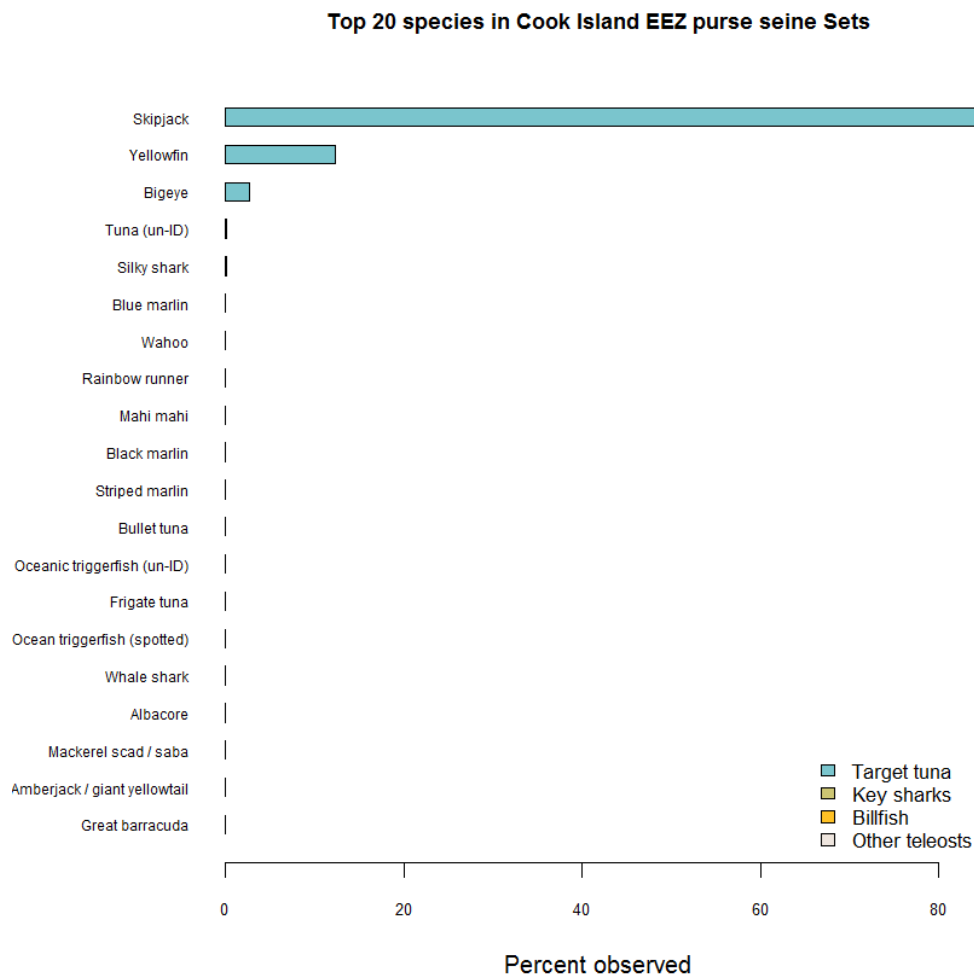
Table 1	Set Type	
	Un-associated	Associated (FADs)
SKJ	85%	85%
YFT	14%	10%
BET	0.12%	4.75%
OTHER	< 1%	0.25%

While the percentage of skipjack tuna remains the same, there is considerable difference in the percentage of yellowfin and bigeye tuna between the two set types. Bigeye catches are higher on FAD sets however yellowfin catches are higher on non-FAD sets. The relative catch of other species is less than 1% within both set types.

Juvenile bigeye are almost exclusive caught by purse seiners at FADs as the juveniles aggregated below these structures and are rarely found among the free swimming schools of skipjack.

The conservation challenge for bigeye is to balance the levels of catches caught at FADs versus the levels of bigeye caught at longliners as more bigeye are actually caught by longliners than purse seiners.

The bar graph below indicates the top 20 species that are observed in purse seine sets. It is clear that skipjack tuna dominates the catch, followed by yellowfin and bigeye. This graph does not differentiate between associated and un-associated set types.



*2. Has the 4 month FAD ban for purse seining under the WCPFC conservation and management measure actually resulted in a decrease of bigeye catches?*

The most recent bigeye catches, for 2014 reported a reduction of bigeye in the purse seine fishery and an increase in the longline fishery.

In 2014 the total bigeye catch was 161,064t which was a drop from the peak record of 190,145t recorded in 2004. The purse seine catches totalled 67,601t. The 4,973t decrease in purse seine was partially offset by the 8,894t increase in the longline fishery.

The region has not done a comprehensive scientific review of the effects of the FAD closure on the rejuvenation of the bigeye tuna and conclusive evidence of the benefits are unlikely to be

demonstrated in the short term as the current measure envisions a ten year time period for the stock rebuilding to occur.

3. Information on the [incorrect figure, 700,000 tonnes] of catch by Pacific Island nations from 2012 to 2014.

Table 2 below outlines a breakdown of purse seine catches from 2012-2014 by Pacific Island nation Exclusive Economic Zones.

Please note that the combined total of the Gilbert, Line and Phoenix Islands that comprise Kiribati (highlighted in light grey) was approximately 700,000 metric tonnes in 2014. Contrastingly, the total purse seine catch taken from Pacific Island EEZs was almost 1.5 million tonnes in the same year.

**Table 2**

<b>Exclusive Economic Zone</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Cook Islands	13,160	8,338	12,461
Fiji	531	162	0
Gilbert Islands	418,868	180,380	416,698
Line Islands	31,269	23,768	49,899
Marshall Islands	25,930	39,635	75,062
Nauru	55,284	161,795	179,560
Papua New Guinea	568,475	591,252	341,842
Palau	738	310	2,736
Phoenix Islands	84,171	78,318	226,068
Solomon Islands	72,503	107,629	55,784
Tokelau	20,539	15,856	26,692
Tuvalu	66,472	52,892	9,7084
Vanuatu	211	0	0
Samoa	919	32	281
<b>Grand Total</b>	<b>1,359,069</b>	<b>1,260,368</b>	<b>1,484,325</b>
Kiribati	534,308	282,466	692,666

Yours Faithfully,

**Ben Ponia**  
Secretary, Marine Resources

