

## **Assumptions regarding west coast rock lobster poaching scenarios for 2014 updated assessments**

**S.J. Johnston**

At the previous SWG meeting Johnston was asked to please circulate to the SWG members the previous assumptions regarding poaching that were used for the 2013 updated assessments (reported in full in **FISHERIES/2013/AUG/SWG-WCRL20**). An email to the SWG members was sent out 2/4/2014 requesting that if anyone had any objections to these assumptions to please respond by the 16 April 2014. No objections were received, and thus it is proposed that the poaching scenarios remain unchanged from those agreed in 2013. These are reported below for clarification:

### **Taken from FISHERIES/2013/AUG/SWG-WCRL20**

#### **“Updated 2013 scenarios**

Both the OLRAC (FISHERIES/2013/AUG/SWG-WCRL/19) and MARAM (FISHERIES/2013/AUG/SWG-WCRL/18) updated analyses of the west coast rock lobster poaching effort and confiscation data were reviewed. It was found that both analyses produced similar overall results, and that these were similar to those produced in 2011. The results show a sizeable decrease in poaching in the northern area, and a fairly large increase in poaching in the south (Area 8+). Taking all results into consideration, and acknowledging that the results provide only a fairly rough indication of the trends, it is proposed that the scenarios regarding recent poaching trends and future scenarios be only slightly modified from those developed in 2011. The following updated scenarios are proposed:

Assumed historic level applies to 1990-2008 (i.e. unchanged from 2011 assumption)

- 100 MT for A3-6 and 400 MT for A8+ (Total = 500 MT), or
- 50 MT for A3-6 and 200 MT for A8+ (Total = 250 MT)

2012+ : A3-6    change relative to 2008 of either 0% or -50%

2012+ : A8+    change relative to 2008 of either +25%, +75% or +125%

Linear changes will be assumed to apply between 2008 and 2012 for all options.

Although the most recent analyses of the poaching data indicate slightly larger measures of poaching “decrease” in the northern areas (since the 2011 analyses), it was not considered a large enough change to warrant altering the previous assumptions., and thus the 0% change and -50% change options for A3-6 remain. The changes to the A8+ poaching trend estimates were more substantial, and it was proposed that the three choices for recent and future poaching levels for A8+ should be updated slightly from 0%, +50 and +100% to +25%, +75% and +125%.

Table 2: The proposed six updated scenarios to cover the most likely options (with their different weights as before) defined are consequently:

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario6	Weighted Average
Weighting	40	10	20	20	5	5	100
4-yr % change for A3-6	-50	-50	-50	0	0	0	-35%
4-yr % change for A8+	+75	+25	+125	+75	+25	+125	+80
% change in total amount poached	+50	+10	+90	+60	+20	+100	+57

Note: The total poaching split between the northern areas (A3-6) and the southern area (A8+) of 0.20 and 0.80 respectively remains unchanged.

NB: In order to create a single combination scenario to be used as a RC for the Operating Models, the weighted average values of -35% for A3-6 and +80% for A8+ will be assumed.

### Recent Hawks confiscations

It was proposed that the recent Hawks data on the poaching tonnage from a particular operator should be taken into account in the updated assessments of the resource as an addition to the amounts above. It is also proposed to assume that this additional poaching will not continue into the future.

The total tonnage (in MT) needs to be split between the super-areas. We traditionally assume the total poaching to be split A1+2=1.5% , A3+4=2.5%, A5+6=2.5%, A7=15% and A8+=80%. Information from the Hawks is that this poaching operation was in the northern areas – this rules out A7 and A8+. The total tonnage is thus proposed to be spit 50:50 between A3+4 and A5+6.”

Table 3: Hawks confiscations estimates.

	<b>HAWKS total (MT)</b>	<b>A3+4</b>	<b>A5+6</b>
2004	58.063	29.032	29.032
2005	31.252	15.626	15.626
2006	22.399	11.200	11.200
2007	41.648	20.824	20.824
2008	60.343	30.172	30.172
2009	47.131	23.566	23.566
2010	118.818	59.41	59.41
2011	<i>54.236*</i>	<i>27.118*</i>	<i>27.118*</i>
2012	<i>54.236*</i>	<i>27.118*</i>	<i>27.118*</i>

\* the average of the 2004-2010 values is proposed to be assumed for the 2011 and 2012 seasons.

No further update regarding the HAWKS confiscation estimates for 2011 and 2012 are available.