

A NOTE ON COMPARISONS OF RECENT WEST COAST ROCK LOBSTER ASSESSMENTS, INCLUDING WITH
OMP-2011 PROJECTIONS

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Recent assessment results in FISHERIES/2015/JAN/SWG-WCRL/2 and FISHERIES/2015/JAN/SWG-WCRL/3 are summarized in Table 1. Note that while the two “2014” sets of results are comparable as they are based on the same data, the “2015” results are not as they include further data. This Table focuses on the estimated 75+ male biomass ratio for 2014 compared to 2006, as this relates to the statistic being used to measure resource recovery, and compares results for the RC1 poaching scenario. The following points are to be noted:

- Although both “2014” sets of results reflect attempts to apply identical methodology, there are some minor differences so that results would not be expected to be absolutely identical.
- For A1+2, the OLRAC fit to the data is clearly inferior so that result can be discounted.
- For A5+6 and A8+, the difference for the “2014” results are small enough not to warrant further consideration.
- For A3+4, the difference is sufficiently large to warrant further examination.
- For A7, FISHERIES/2015/JAN/SWG-WCRL/2 notes problems arising from multi-modality of the likelihood surface, which is under further investigation.

In summary, it would seem that the primary further need is further investigation of the A3+4 assessment. This would be best initiated by the two analysts concerned exchanging their “2014” parameter estimates for substituting in the other’s code to compare likelihoods.

Table 2 provides a comparison between the OMP-2011 agreed OMP-targets (as estimated and projected at that time) and the “2015” assessment results of FISHERIES/2015/JAN/SWG-WCRL/2, though here weighted across both RC1 and RC2 poaching scenarios for comparability with OMP-2011 results, rather than for RC1 only as above. Comparisons should be considered circumspectly, given the uncertainty about current estimates for A7. Nevertheless the following is indicated for the “2015” assessment results:

- Relative to 2006, biomass recovery is ahead of the OMP-2011 recovery schedule.
- However, when considering biomass in absolute terms, abundance is now estimated to be less than at the time of the OMP-2011 projections both in 2006 and in 2014.

Table 1: Comparison between OLRAC and MARAM B75m(2014)/B75m(2006) values as calculated for the “2014” RC1 (i.e. historical poaching = 500 MT) assessments. The initial MARAM updated 2015 assessment values are also given (final column).

	MARAM 2014	OLRAC 2014	MARAM 2015*
A1+2	0.77	1.30	0.77
A3+4	1.20	1.60	1.28
A5+6	1.50	1.56	1.86
A7	0.12	0.59	1.13
A8	0.91	0.87	1.03
Total excl A7	1.07	1.16	1.19
Total	0.97	1.09	1.18

*The 2015 assessment update includes further data (2010-2013 FIMS catch-at-length and F% data)

Table 2: Comparison between the OMP-2011 agreed OMP-targets (as estimated and projected at that time) and the initial 2015 MARAM updated assessments, here weighted over both the RC1 (500 MT historical) and RC2 (250 MT historical) historic poaching scenarios.

		B2006	B2014	B2006/K	B2014/2006	B2017/2006	B2021/2006
A1+2	OMP-2011	604	634	0.016	1.05	1.10	1.26
	2015 ass	355	274	0.007	0.77	-	-
A3+4	OMP-2011	2 867	2 953	0.019	1.03	1.22	1.28
	2015 ass	3 949	5 056	0.027	1.28	-	-
A5+6	OMP-2011	2 126	2 870	0.015	1.35	1.45	1.62
	2015 ass	1 946	3 619	0.009	1.86	-	-
A7	OMP-2011	8 015	9 057	0.037	1.13	1.56	1.93
	2015 ass	2 950	3 220	0.021	1.09	-	-
A8	OMP-2011	9 660	7 728	0.050	0.80	0.79	0.98
	2015 ass	9 538	9 895	0.051	1.04	-	-
Total excl A7	OMP-2011	15 257	14 189	0.029	0.93	1.04	1.22
	2015 ass	15 788	18 844	0.026	1.19	-	-
Total	OMP-2011	23 272	23 272	0.031	1.00	1.15	1.35
	2015 ass	18 738	22 064	0.025	1.18	-	-

*The 2015 assessment update includes further data (2010-2013 FIMS catch-at-length and F% data)