

# Results for the final OMP 2008 selected for the South Coast Rock Lobster Resource

S.J. Johnston and D.S. Butterworth.

MARAM  
Department of Mathematics and Applied Mathematics  
University of Cape Town  
Rondebosch

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## Introduction

In Johnston and Butterworth (2008) results for a range of OMPs for the South Coast rock lobster fishery were reported. These OMPs varied with respect to the maximum extent of inter-annual TAC variability allowed (5%, 7.5% or 10%) as well as the median spawning biomass recovery anticipated over the next 20 years ( $B^sp$  (2025/2006) - ranges from 1.10 to 1.25 were presented).

The South Coast rock lobster SWG had previously decided that the preferred OMP should be intermediate to the OMP 4 and OMP 5 presented in Johnston and Butterworth (2008) which would:

1. have a 5% maximum TAC change constraint, and
2. have a median anticipated  $B^sp$  (2025/2006) of 1.20 under operating Model 3 (MARAM TVS).

## Results

Table 1 reports performance statistics for this final OMP 2008 under either operating Model 3 (MARAM TVS) or Model 4 (OLRAC TVS). The tuning parameter  $\delta$  for the final OMP is -0.006. Figure 1 shows the TAC,  $B^sp$  and V (annual TAC variability as a %) trajectories for both Model 3 and Model 4.

Johnston *et al.* (2008) provides a full description of the final OMP 2008 and the GLM analysis of the CPUE input data into the OMP.

## References

Johnston, S.J. and D.S. Butterworth. 2008. Final set of OMP results for the South Coast Rock Lobster Resource OMP. MCM document, MCM/2008/JUL/SWG-SCRL/26.

Johnston, S.J., Glazer, J.P. and J. Gaylard. 2008. OMP 2008 for the South Coast Rock lobster. MCM document, MCM/2008/AUG/SWG-SCRL/ZZ.

Table 1: Model 3 (MARAM TVS) and Model 4 (OLRAC TVS) summary performance statistics for the final selected OMP. Medians with 5<sup>th</sup> and 95<sup>th</sup> percentiles are reported.

	<b>FINAL OMP</b>	<b>FINAL OMP</b>
	Model 3 (MARAM TVS)	Model 4 (OLRAC TVS)
$\delta$	0.005	0.005
TAC constraint (%)	5	5
$C_{ave}^7$ (2006-2012)	346 [343; 363]	347 [343; 377]
$C_{ave}^{10}$ (2006-2015)	340 [323; 369]	351 [327; 391]
$C_{ave}^{20}$ (2006-2025)	350 [296; 408]	364 [302; 436]
$C$ (2008)	363 [363; 363]	363 [363; 373]
$C$ (2009)	345 [345; 357]	345 [345; 381]
$C$ (2010)	328 [328; 356]	328 [328; 389]
$V^7$ (2006-2012)	4 [3; 4]	3 [2; 4]
$V^{10}$ (2006-2015)	4 [3; 4]	4 [3; 4]
$V^{20}$ (2006-2025)	4 [4; 5]	4 [4; 5]
$B^{sp}$ (2015/2006) 90% range	1.24 [0.96; 1.68]	1.19 [0.96; 1.54]
$B^{sp}$ (2025/2006) 90% range	1.20 [0.87; 1.70]	1.21 [0.90; 1.69]
$B^{sp}$ (2006/K)	0.34	0.47
$B^{sp}$ (2015/K)	0.42 [0.33; 0.57]	0.57 [0.45; 0.72]
$B^{sp}$ (2025/K)	0.41 [0.29; 0.58]	0.57 [0.42; 0.79]
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Figure 1: Median annual TAC,  $B_{sp}$  and V (inter-annual TAC change as a %) trajectories with the 5<sup>th</sup> and 95<sup>th</sup> percentiles for the final OMP 2007 - Model 3 (left panel) and Model 4 (right panel). Note that 95<sup>th</sup> percentiles and median co-inside for V. The vertical shows the start of the projected series.

