

Further Trends in policing effort and the number of confiscations for West Coast rock lobster on a Super-area basis

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Introduction

Brandão *et al.* (2011) reported trends in policing effort and the number of confiscations for West Coast rock lobster on a super-area basis.

Following suggestions made at the SWG meeting on 5 August 2011, updated results using the same method as described in Brandão *et al.* (2011) are reported here. Following SWG recommendations, the analyses presented here exclude data from Area 1+2.

Results are presented for both a log-linear GLM model and a discrete year factor analysis. Results are also calculated either for the whole area excluding Area 1+2 (Area 3-8+), or where the data are split into Area 8+ and Area 3+4+5+6.

Results

Table 1 gives the percentage change in the poaching level over two years for the MARAM continuous time model and the percentage change from 2009 to the average of 2010 and 2011 for the poaching indices for the discrete time model.

Figures 1 to 3 also show the ratio of confiscations (plus abandonments) to policing effort for the different super-areas, corresponding to indices of the amount of rock lobster poached.

Reference

Brandão, A., Johnston, S.J. and Butterworth, D.S. 2011. Trends in policing effort and the number of confiscations for West Coast rock lobster. Fisheries/2011/AUG/SWG-WCRL/46.

Table 1. Summary of two year change in poaching levels (and 95% confidence intervals) for the continuous log-linear model and the percentage change from 2009 to the average of 2010 and 2011 for the poaching indices for the discrete year factor model.

	MARAM Continuous model	MARAM discrete year model
Area 3+4+5+6	-79.7% (-21.2%; -94.7%)	-63.8%
Area 8+	86.1% (-13.6%; 301%)	129.2%
Area 3+4+5+6+8+	80.2% (-20.1%; 306.5%)	143.7%

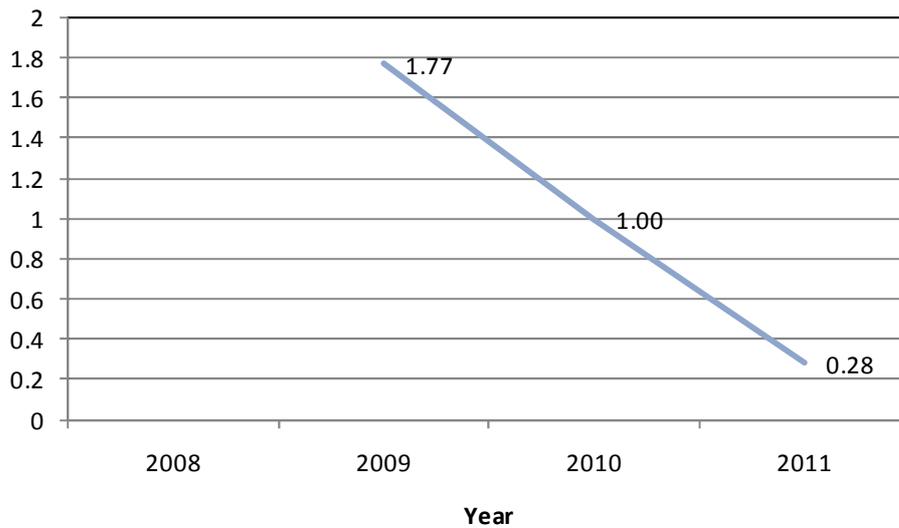
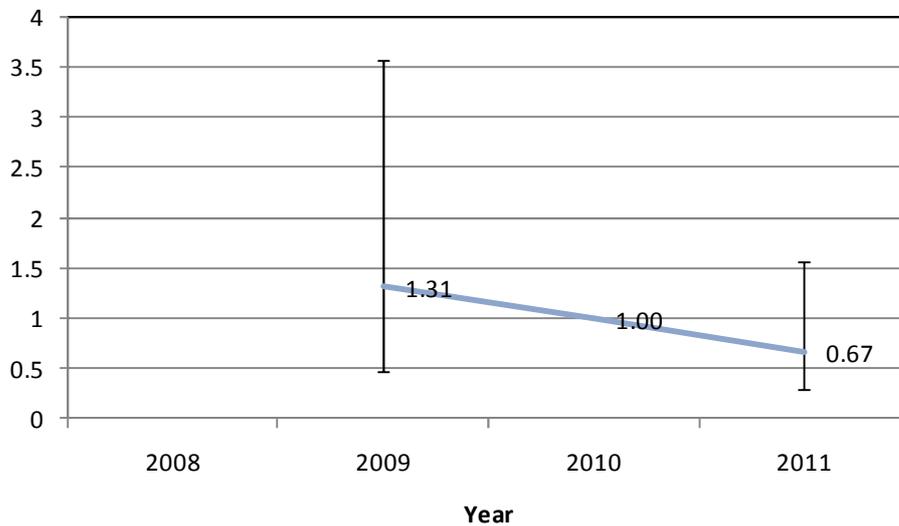
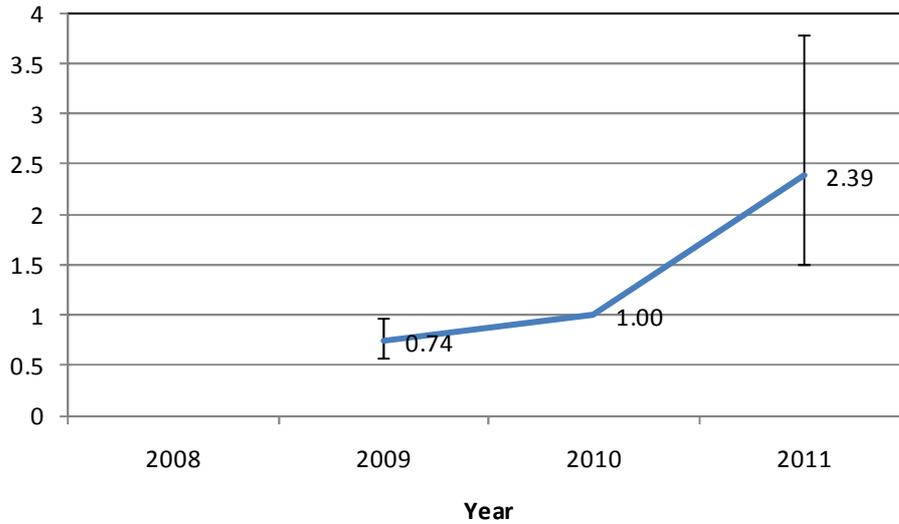


Figure 1. Year effect (together with 95% confidence limits) for policing effort (top), the number of confiscations plus abandonments (middle) and the ratio of the number of confiscations plus abandonments to policing effort for super-area 3+4+5+6.

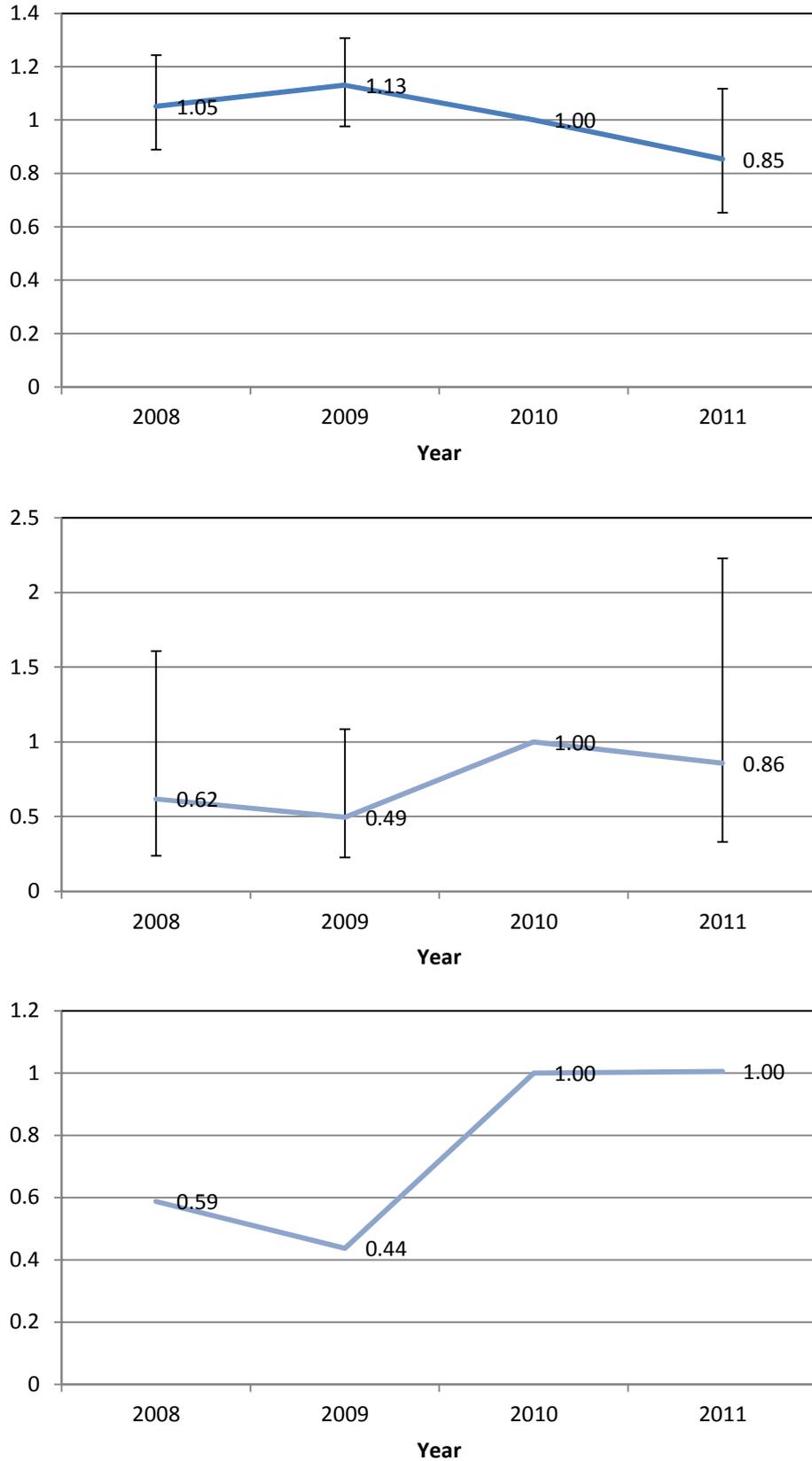


Figure 2. Year effect (together with 95% confidence limits) for policing effort (top), the number of confiscations plus abandonments (middle) and the ratio of the number of confiscations plus abandonments to policing effort for super-area 8+.

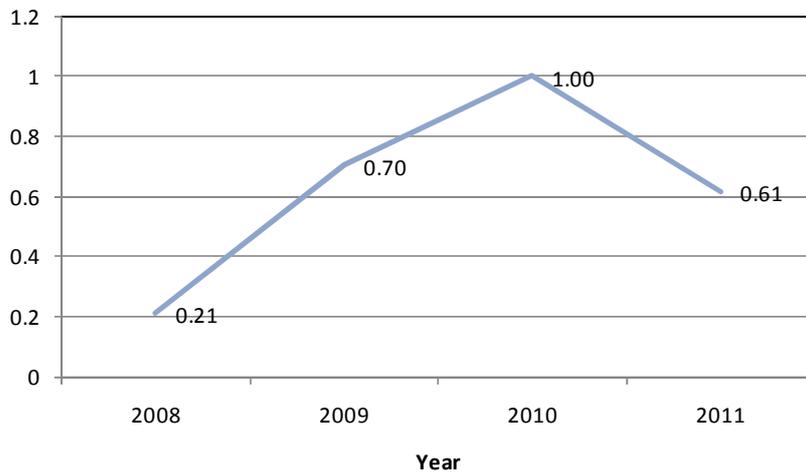
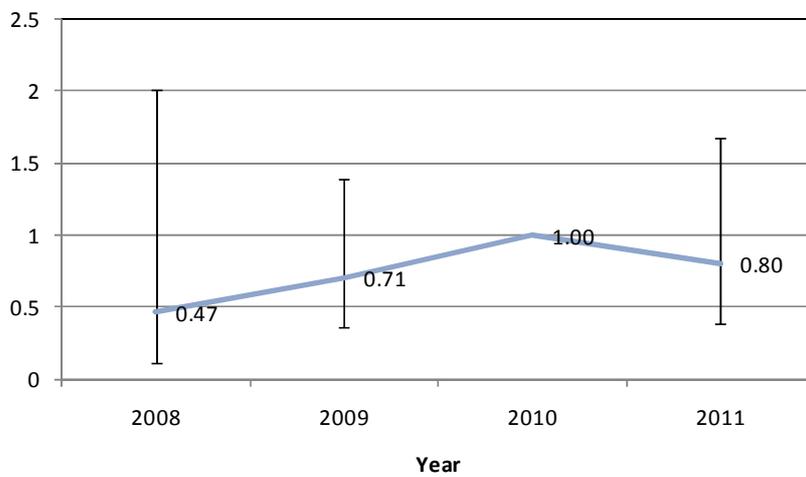
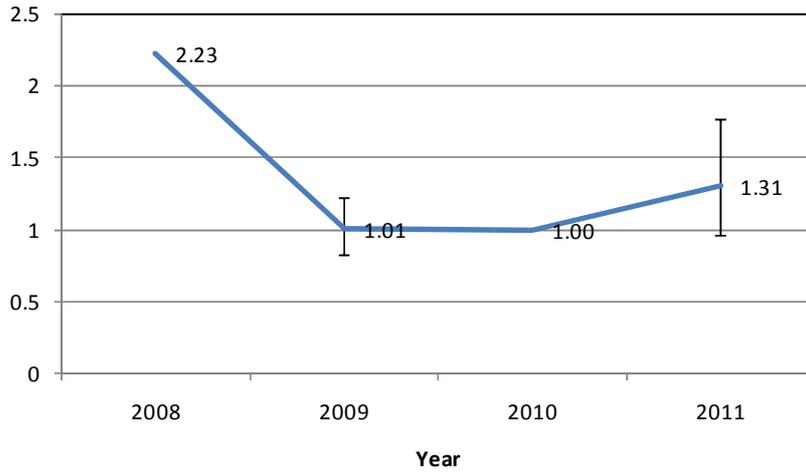


Figure 3. Year effect (together with 95% confidence limits) for policing effort (top), the number of confiscations plus abandonments (middle) and the ratio of the number of confiscations plus abandonments to policing effort for combined super-area 3+4+5+6+8+.

