A Simple Indication of the Scientific Implications of Switching Some of the Longline Hake Allocation to Offshore

RA Rademeyer and DS Butterworth

August 2010

At the Demersal Working Group meeting on 13 August 2010, an application to switch some of the hake longline allocation to offshore trawling came under attention, and a quantitative indication was requested of the associated scientific implications.

This short paper addresses this question in a simple manner by using one on the Candidate Management Procedures (specifically CMPc1a, turned to a median average catch over the next decade of 135 thousand tons) currently under consideration. The impact on performance of switching half the current longline allocation to offshore trawl (corresponding to a transfer of 3% of the TAC) under Reference Set a is evaluated.

The results are shown in Table 1 and Fig. 1 below. The performance deterioration in the transfer away from longline is very slight, to the extent that it might be considered negligible in practical terms.

Table 1: Projections results (either median or lower 2.5%ile) for a series of performance statistics for CMPc1a for the current fleet splitting of the catches, and for the case when half of the longline allocation is used by the offshore trawl fleet ("longline").

			CMPc1a	CMPc1a longline
		RSa		
median	BS	avC: 2011-2020	135.0	134.3
low	para	$B^{sp}_{low}/B^{sp}_{2010}$	0.72	0.72
low	cap	$B^{sp}_{low}/B^{sp}_{2010}$	0.75	0.76
median	para	B^{sp}_{2020}/B_{MSY}	1.12	1.09
median	cap	B^{sp}_{2020}/B_{MSY}	2.89	2.90
median	BS	AAV	3.4	3.4
low	BS	lowest TAC (2011-2030)	104.0	102.8
		RSb		
median	BS	avC: 2011-2015	129.8	129.1
low	para	$B^{sp}_{low}/B^{sp}_{2010}$	0.93	0.93
low	cap	$B^{sp}_{low}/B^{sp}_{2010}$	0.82	0.88
median	para	B^{sp}_{2020}/B_{MSY}	0.91	0.87
median	cap	B^{sp}_{2020}/B_{MSY}	0.55	0.58
median	BS	AAV	3.2	3.3
low	BS	lowest TAC (2011-2030)	102.7	102.1

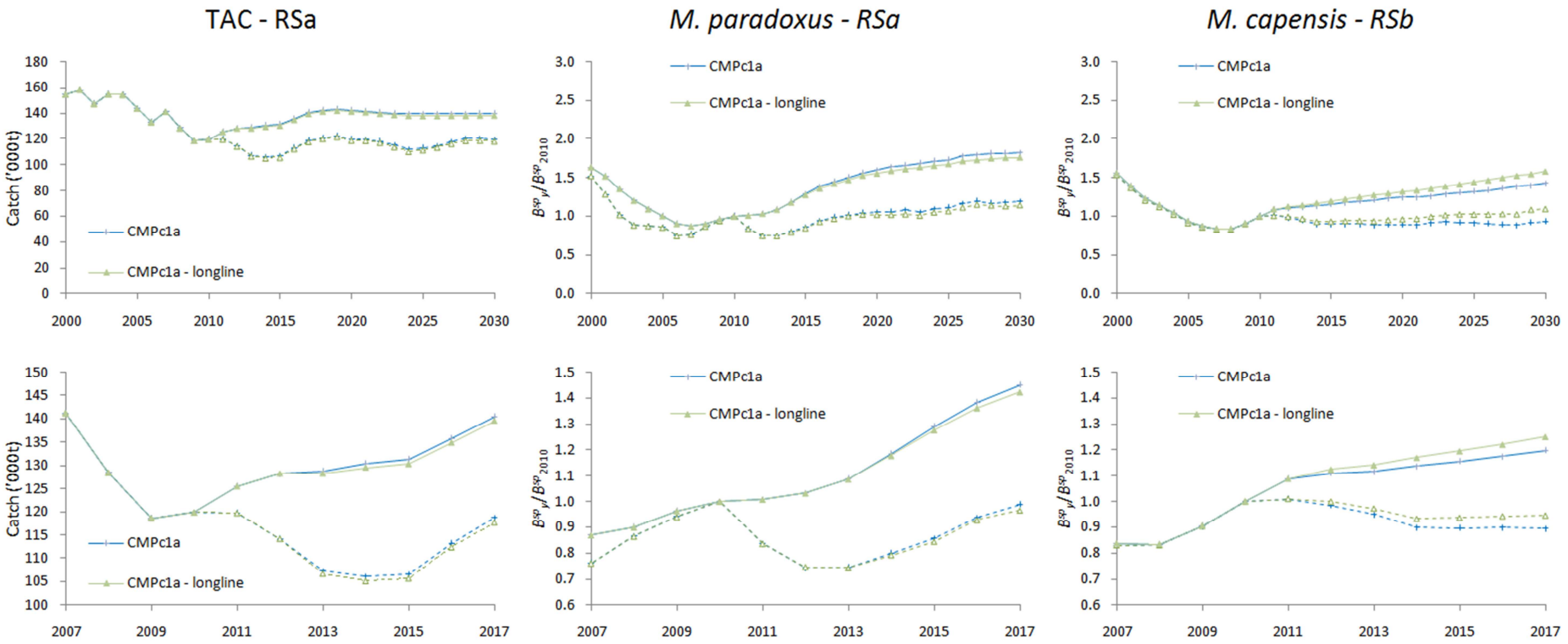

Fig. 1: Median (full lines) and lower 2.5%iles (dashed lines) TAC (RSa) and spawning biomass (in terms of 2010 level) for *M. paradoxus* (RSa) and *M. capensis* (RSb) for CMPc1a for the current fleet splitting of the catches, and for the case when half of the longline allocation is used by the offshore trawl fleet.