OMP-2010 outputs for 2012 TAC computations for a range of 2010 CPUE values

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Although not all the data required to compute the hake TAC for 2012 under OMP-2010 are yet available, the calculations below have been undertaken to provide assistance to the industry in advance planning.

To compute the 2012 TAC recommendation using OMP-2010 (Rademeyer *et al*., 2010), the following data are required:

1) West coast summer survey biomass estimates in 2011 for *M. paradoxus* and *M. capensis*;
2) South coast autumn survey biomass estimates in 2011 for *M. paradoxus* and *M. capensis*;
3) GLM-standardised CPUE series up to 2010, disaggregated by coast and species; and
4) 2010 catch disaggregated by fleet and species.

The 2011 survey biomass estimates are already available (Durholtz, 2011 and Fairweather, 2011) (see Table 1 and Fig. 1). Since the 2010 catch is not yet available disaggregated by species and fleet, it is assumed that the 2009 fleet and species proportions apply in 2010. For the GLM-standardised CPUE series, a range of 2010 values (ranging from -50% to +50% of the 2009 values, where the same proportional change is assumed for each series) are input to OMP-2010 to get an indication of the probable range within which the TAC for 2012 will lie.

Table 2 gives the OMP-2010 outputs for the different CPUE series.

References

Durholtz D. 2011. Report of the January 2011 West coast demersal survey. Unpublished report: FISHERIES/2011/MAR/SWG-DEM/02. 26pp.

Fearweather T. 2011. Draft report of the April 2011 south coast demersal abundance survey. Unpublished report: FISHERIES/2011/MAY/SWG-DEM/18. 26pp.

Rademeyer RA, Fairweather T, Glazer JP, Leslie RL and Butterworth DS. 2010. The 2010 Operational Management Procedure for the South African Merluccius paradoxus and M. capensis resources. Unpublished report: FISHERIES/2010/OCTOBER/SWG-DEM/59. 36 pp.

Table 1: West coast summer and south coast autumn survey abundance estimates used as input in the 2012 TAC computations. Note, the abundance estimates in bold are for surveys that have been conducted with the new gear on the *Africana*.

	West coast summer				South coast autumn			
Year	*M. paradoxus*		*M. capensis*		*M. paradoxus*		*M. capensis*	
	Biomass	(s.e.)	Biomass	(s.e.)	Biomass	(s.e.)	Biomass	(s.e.)
2006	315.310	(49.490)	88.420	(22.851)	34.799	(8.325)	130.900	(14.816)
2007	**392.812**	(70.043)	**82.270**	(11.441)	**129.646**	(60.661)	**70.940**	(5.615)
2008	**246.542**	(51.973)	**50.877**	(5.355)	**39.505**	(11.408)	**108.195**	(9.978)
2009	**330.235**	(28.526)	**175.289**	(39.920)	**102.834**	(28.670)	**124.004**	(11.808)
2010	592.571	(87.610)	164.660	(34.710)	169.560	(67.650)	184.960	(37.720)
2011	**347.082**	(92.540)	**89.282**	(23.219)	**24.105**	(7.089)	**117.222**	(11.857)

Table 2: OMP-2010 outputs for the 2012 TAC (in '000s t) for a range of 2010 CPUE values.

All 2010 CPUE values	2012 output
down 50% from 2009	133.56
down 20% from 2009	140.95
as 2009	144.45
up 20% from 2009	144.96
up 50% from 2009	144.96

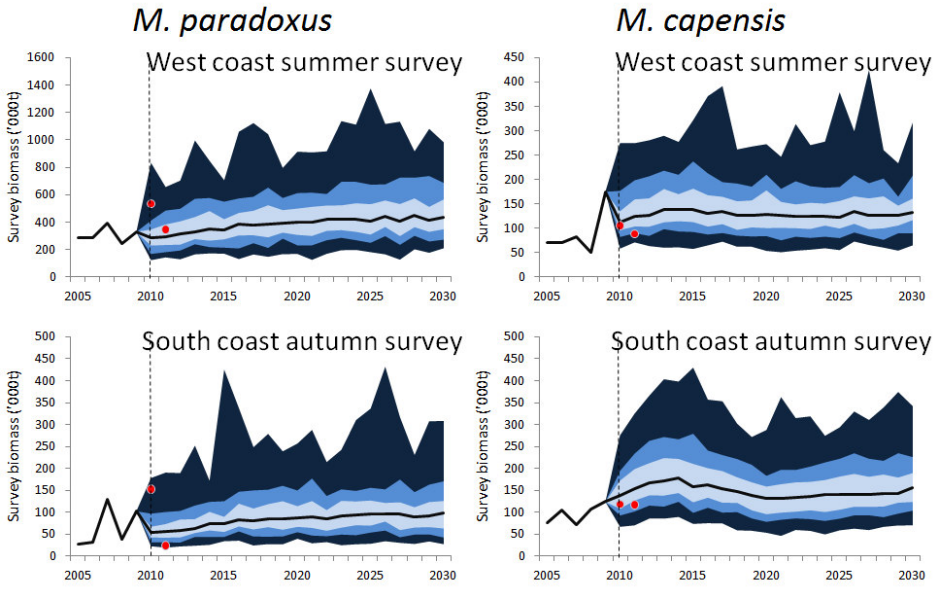

Fig. 1: 95, 75, 50% PI and median for the survey abundance indices for *M. paradoxus* and *M. capensis* for RSa under OMP-2010. The red dots show the values used for the computation of the 2011 and 2012 TACs. Note: future surveys are assumed to be carried out using the new gear on the *Africana*.