



Summary of Ongoing Analysis and Further Data Queries for the South African Hake

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Ongoing Analysis

We are currently in the process of incorporating catch-at-length information when fitting the hake ASPM. Catch-at-length information is used instead of catches-at-age based on averages of age-length keys for other years (a problematic and potentially biased approach) in years for which age-length keys are not available. In the results to date, the proportion of fish in the minus group is consistently over predicted. We are working on understanding and adjusting for this.

Two further updates to the model include a) a move back to Pope's approximation to speed model fitting and b) fitting to coast-specific information for the commercial data (previously, the model fit was coast-specific only for the survey data).

Once the fit of this model is satisfactory, it will be used as an updated baseline assessment to test further sensitivities. The sensitivities that will be tested include:

- 1) using the offshore trawl post-1977 catches and CPUE calculated using the observer-based species splitting algorithm;
- 2) different assumptions re densities in trawlable vs. untrawlable areas; and
- 3) starting the model in 1978.

Data Queries

Tables 1 to 3 list the age information currently available and indicates gaps in the data.

Further data needed include sex-specific age-length keys.

Table 1: Survey age information currently available. Here and in subsequent tables, entries that are shaded indicate that further data should be available, when 'CAL' is shaded this indicate that an ALK should be available to compute CAA.

<i>M. capensis</i>					<i>M. paradoxus</i>				
Year	West Coast Summer	West Coast Winter	South Coast Autumn	South Coast Spring	Year	West Coast Summer	West Coast Winter	South Coast Autumn	South Coast Spring
1985	CAL	CAL			1985	CAL	CAL		
1986	CAA	CAA		CAL	1986	CAL	CAL		CAL
1987	CAA	CAA		CAL	1987	CAL	CAL		CAL
1988	CAA	CAA	CAL		1988	CAA	CAA	CAL	
1989		CAA			1989		CAL		
1990	CAA	CAA			1990	CAA	CAA		
1991	CAA		CAA		1991	CAA		CAA	
1992	CAA		CAA		1992	CAA		CAA	
1993	CAA		CAA		1993	CAA		CAA	
1994	CAA		CAA		1994	CAA		CAA	
1995	CAA		CAA		1995	CAA		CAA	
1996	CAA		CAA		1996	CAA		CAA	
1997	CAA		CAA		1997	CAA		CAA	
1998					1998				
1999	CAA		CAA		1999	CAA		CAA	
2000					2000				
2001				CAL	2001				CAL
2002	CAL				2002	CAL			
2003	CAL		CAL	CAL	2003	CAL		CAL	CAL
2004	CAL		CAL	CAL	2004	CAL		CAL	CAL
2005	CAL		CAL		2005	CAL		CAL	
2006	CAL		CAL	CAL	2006	CAL		CAL	CAL
2007	CAL		CAL	CAL	2007	CAL		CAL	CAL
2008	CAL		CAL		2008	CAL		CAL	

Table 2: Commercial age information currently available.

Year	West Coast Offshore Species combined	South Coast Offshore Species combined	South Coast Inshore <i>M. capensis</i>	West Coast Longline Species combined	South Coast Longline <i>M. capensis</i>
1975		CAL			
1976		CAL			
1977		CAL			
1978	CAA	CAA			
1979	CAA	CAA			
1980	CAA	CAA			
1981	CAA	CAA	CAL		
1982	CAA	CAA	CAL		
1983	CAA	CAA	CAL		
1984	CAA	CAA	CAL		
1985	CAA	CAA	CAL		
1986	CAA	CAA	CAL		
1987	CAA	CAA	CAL		
1988	CAA	CAA	CAL		
1989	CAA	CAA	CAA		
1990	CAA	CAA	CAA		
1991	CAA	CAA	CAA		
1992	CAA	CAA	CAA		
1993	CAA	CAA	CAA		
1994	CAA	CAA	CAA	CAL	CAA
1995	CAA	CAA	CAA	CAL	CAA
1996	CAA	CAA	CAA	CAL	CAA
1997	CAL		CAA	CAL	CAA
1998	CAL		CAA		
1999	CAL		CAA		
2000			CAA		CAA
2001					
2002					
2003					
2004					
2005					
2006					
2007					
2008					

Table 3: Survey ALKs currently available.

	<i>M. paradoxus</i> Coasts combined	<i>M. capensis</i> South Coast	<i>M. capensis</i> West Coast
1985			
1986			
1987			
1988	yes	yes	yes
1989		no survey	
1990	yes	yes	yes
1991	yes	yes	yes
1992	yes	yes	yes
1993	yes	yes	yes
1994	yes	yes	yes
1995	yes		yes
1996	yes		yes
1997	yes		yes
1998		no survey	
1999	yes		yes
2000	yes		yes
2001			
2002			
2003			
2004			
2005			
2006			
2007			
2008			