

## Document List

### ***General:***

**General 1:** Announcement. 1pp.

**General 2:** Schedule. 1pp.

**General 3:** Document list. 3pp.

**General 4:** Announcement: Defining the scope of EAF – discussion session during the International Stock Assessment workshop. 2pp.

**General 5:** Key questions for the Panel to address. 2pp

### ***Hake:***

#### Primary Documents:

**P1:** MARAM/IWS/DEC15/Hake/P1. Ross-Gillespie, A. and Butterworth, D.S. 2015. Modelling cannibalism and inter-species predation for Cape hake *Merluccius capensis* and *M. paradoxus*.: Model specifications and preliminary results. 26pp.

#### Background Documents:

**BG1:** Ross-Gillespie A, Butterworth D.S, Fairweather T.P. and Rademeyer R.A. 2015. Investigating different methods for obtaining hake survey probability distributions for length, and an inspection the sub-sample for which biologicals were measured. 26pp.

**BG2:** Ross-Gillespie A and Butterworth D.S. 2014. Modelling cannibalism and inter-species predation for Cape hake *Merluccius capensis* and *M. paradoxus*: an update to MARAM/IWS/DEC13/Ecofish/P10. 26pp.

**BG3:** Ross-Gillespie A. 2015. Report on progress made on the hake cannibalism and inter-species predation model. 6pp.

**BG4:** Rademeyer, R.A. 2014. An initial attempt at a spatially structured stock assessment for the South African hake resource including movement based on a gravity model. MARAM/IWS/DEC14/Hake/P5. 38pp.

### ***Sardine:***

#### Primary Documents:

**P1:** de Moor CL, Butterworth DS. 2015. The stock assessment model for South African sardine. 18pp.

**P2:** van der Lingen CD, Mushanganyisi KS. 2015. Preliminary analyses of infection of western and southern sardine by a “tetracotyle” type digenean parasite from samples collected during the November pelagic biomass surveys and May pelagic recruit surveys, 2010-2014. 12pp

**P3:** de Moor CL, Butterworth DS. 2015. Initial results from fitting the revised sardine two-mixing-stock model to data from 1984-2014, including parasite prevalence-by-length sampled from November surveys 2010-2014. 18pp.

#### Background Documents:

**BG1:** de Moor CL, Butterworth DS, van der Lingen CD. 2015. Overview of Sardine Documents. 2pp

- BG2:** de Moor CL, Butterworth DS, van der Lingen CD, Coetzee J. 2015. Progress report on recommendations from the international review panel report for the 2013 and 2014 International Fisheries Stock Assessment Workshop: sardine two-stock hypothesis. 10pp
- BG3:** de Moor CL, Coetzee J, Merkle D, van der Westhuizen JJ, van der Lingen C. 2015. A record of the generation of data used in the 2015 sardine and anchovy assessments. Department of Agriculture, Forestry and Fisheries Report No FISHERIES/2015/NOV/SWG-PEL/42. 20pp.
- BG4:** de Moor CL, Butterworth DS. 2015. Assessing the South African sardine resource: two stocks rather than one? African Journal of Marine Science 27:41-51. 12pp (link to journal on MARAM site)
- BG5:** de Moor CL, Butterworth DS, van der Lingen CD, Coetzee JC. 2014. Alternative hypotheses of two mixing stocks of South African sardine: Initial testing. International Fisheries Stock Assessment Workshop Report No MARAM/IWS/DEC14/Sardine/P2. 20pp.
- BG6:** Weston LF, Reed CC, Hendricks M, Winker H, van der Lingen CD. 2015. Stock discrimination of South African sardine (*Sardinops sagax*) using a digenean parasite biological tag. Fisheries Research 164:120-129. 10pp (link to journal on MARAM site)
- BG7:** van der Lingen CD, Weston LF, Ssempe NN, Reed CC. 2015. Incorporating parasite data in population structure studies of South African sardine *Sardinops sagax*. Parasitology 142: 156-167. 12pp (link to journal on MARAM site)
- BG8:** van der Lingen CD, Reed CC, Hendricks M, Nunkoo I, Winker H. 2015. Update on the processing for “tetracotyle” type metacercariae of sardine from commercial samples, 2011-2014, and preliminary analyses thereof. Department of Agriculture, Forestry and Fisheries Report No. FISHERIES/2015/FEB/SWG-PEL/02. 8pp.

### ***Penguins - Detection of closure effect on birds:***

#### Primary documents:

- P1:** Penguin Island Closure Task Team. 2015. Specifications for operating models to evaluate bias in estimation methods in accordance with recommendation A.1 of the 2014 International Review Panel. 10pp.
- P2:** Penguin Island Closure Task Team. 2015. Consolidated analyses produced in implementation of the approaches described in document MARAM/IWS/DEC15/PengD/P1. 40pp.
- P3:** Penguin Island Closure Task Team. 2015. Penguin power analysis methodology – Draft. 4pp.
- P4:** Penguin Island Closure Task Team. 2015. Simulation testing of penguin closure effect response estimators – Where next? 6pp.
- P5:** Cochrane, K. 2015. Chair’s overview of progress in the simulation testing of penguin closure effect response estimators as reported in MARAM/IWS/DEC15/PengD/P1-4. 6pp.

#### Background documents:

- BG1:** Coetzee, J. 2015. The current set of available data for evaluation of the Island Closure Feasibility study. 2015. 14pp

- BG2:** Butterworth, D.S. and Moosa, N. 2015. A note on the extent of autocorrelation of residuals in the GLM analyses of penguin response variables in the feasibility study. FISHERIES/2015/MAY/SWG-PEL/18. 8pp
- BG3:** Butterworth, D.S. 2015. On plans for penguin analyses arising from some of the IWS panel: recommendations. FISHERIES/2015/MAY/SWG-PEL/17. 6pp
- BG4:** Butterworth, D.S. 2015. Suggestions re further penguin power analysis and estimator simulation tests in response to panel recommendations. FISHERIES/2015/AUG/SWG-PEL/PENG/D1. 6pp
- BG5:** Butterworth, D.S. and Coetzee, J. 2015. Progress in relation to penguin recommendations by the International Review Panel for the 2014 International Fisheries Stock Assessment Workshop 1-5 December 2014, UCT. 10pp
- BG6:** Workshop report: meeting on the future of the Island Closures study. 4pp

***Penguins - Impact of closure on industry:***

Primary documents:

- P1:** OLRAC: Final Report: The economic impact of penguin island closures on the pelagic fishing industry:  
Extract for the Panel. 24pp.