

**Documents for the MARAM/DFFE International Fisheries Stock Assessment Review
Workshop 2025**

Document General 8

General

General 1: Announcement. IWS/2025/General/1. 1 pp.

General 2: Wednesday discussion announcement. IWS/2025/General/2. 1 pp.

General 3: Schedule. IWS/2025/General/3. 1 pp.

General 4: Virtual attendance. IWS/2025/General/4. 1 pp.

General 5: Wednesday discussion schedule. IWS/2025/General/5. 2 pp.

General 6: Video Statement by the Minister of Forestry, Fisheries and the Environment, Minister Willem Aucamp. IWS/2025/General/6.

General 7: Written Statement by the Minister of Forestry, Fisheries and the Environment, Minister Willem Aucamp. IWS/2025/General/7. 2 pp.

General 8: Workshop document list. IWS/2025/General/8. 7pp. ← **this document**

General 9: Workshop song - Fishy business. IWS/2025/General/9.

General 10: Workshop song - Rho Sigma Tilde. IWS/2025/General/10.

General 11: Presentation of the Panel report. 26 slides. IWS/2025/General/11. 26 slides.

General 12: IWS 2025 Final Panel report. 21 pp. IWS/2025/General/12. 21 pp.

Improving Scientific Communication and Media - reporting on Marine Resource Management Issues Wednesday discussion session

1: Bergh, M. 2025. Communicating the science behind living marine resource management. 19 slides.

2: Butterworth, D. 2025. An overview of possible discussion points. 9 slides.

3: Cochrane, K. 2025. Improving Scientific Communication and Media Reporting on Marine Resource Management Issues. 8 slides.

4: Evans, J. 2025. The Translation Gap: Bridging Science and the Public. 8 slides.

5: SANCOR. 2025. Beyond the Headlines: Why Clear Scientific Communication Matters for Fisheries.

Sardine

Primary papers

Sardine/P1: Anon. 2025. List of the key focus questions for the panel regarding sardine (and anchovy), together with brief summaries of the documents provided. IWS/2025/Sardine/P1. 3 pp.

Sardine/P2: de Moor, C.L. 2025. Stock recruitment relationships for South African anchovy. IWS/2025/Sardine/P2. 8 pp.

Sardine/P3: de Moor, C.L. 2025. Projections of the sardine population using an operating model which does not estimate stock-recruitment relationships during conditioning. IWS/2025/Sardine/P3. 15 pp.

Sardine/P4: de Moor, C.L. 2025. Projections of the sardine population using an operating model with parametric stock-recruitment relationships estimated during conditioning. IWS/2025/Sardine/P4. 13 pp.

Sardine/P5: Bergh, M. 2025. Correcting the recruitment process error variance for bias due to recruitment estimation error. IWS/2025/Sardine/P5. 6 pp.

Sardine/P6: Bergh, M. 2025. Some issues and questions regarding sardine model fits and associated Markov chains. IWS/2025/Sardine/P6. 3 pp.

Sardine/P7: de Moor, C.L. 2025. Projections of the sardine population using an operating model which does not estimate stock-recruitment relationships during conditioning and uses a 'binning' approach for generating future recruitment. IWS/2025/Sardine/P7. 9 pp.

Background papers

Sardine/BG1: de Moor, C.L. and Coetzee, J.C. 2024. A summary of the sardine fishery. IWS/2025/Sardine/BG1. 20 pp.

Sardine/BG2: de Moor, C.L., Merkle, D., Coetzee, J. and van der Lingen, C.D. 2024. The data used in the 2024 sardine assessment. IWS/2025/Sardine/BG2. 31 pp.

Sardine/BG3: de Moor, C.L. 2025. Revisions to the updated assessment model for the revised sardine stock structure hypothesis. IWS/2025/Sardine/BG3. 19 pp.

Sardine/BG4: de Moor, C.L. 2025. Results from the updated stock assessment model of the revised South African sardine stock structure hypothesis. IWS/2025/Sardine/BG4. 38 pp.

Sardine/BG5: de Moor, C.L. 2025. Scoping MSE for South African sardine. IWS/2025/Sardine/BG5. 11 pp.

Sardine/BG6: de Moor, C.L., Merkle, D. and Coetzee, J. 2024. The data used in the 2024 anchovy assessment. IWS/2025/Sardine/BG6. 15pp.

Sardine/BG7: de Moor, C.L. Assessment of the South African anchovy resource using data up to 2024. IWS/2025/Sardine/BG7. 46 pp.

Sardine/BG8: Methot Jr, R.D. and Taylor, I.G. 2011. Adjusting for bias due to variability of estimated recruitments in fishery assessment models. IWS/2025/Sardine/BG8. 17 pp.

Presentations

Sardine/Pres1: de Moor, C.L. 2025. An Introduction to the South African Sardine Resource and Fishery. IWS/2025/Sardine/Pres1. 25 slides.

Sardine/Pres2: Bergh, M. 2025. Some issues and questions regarding sardine model fits and associated Markov chains: Document P6. IWS/2025/Sardine/Pres2. 9 slides.

Working papers

Sardine/WP1: de Moor, C.L. 2025. MSE Performance Statistics for Target Resource v Ecosystem. IWS/2025/Sardine/WP1. 1 pp.

Sardine/WP2:

Sardine/WP3: de Moor, C.L. 2025. Further consideration of relationships between recruitment and spawner biomass. IWS/2025/Sardine/WP3. 7pp.

Sardine/WP4: de Moor, C.L. 2025. Recruitment deviates. IWS/2025/Sardine/WP4. 2 pp.

Sardine/WP5: de Moor, C.L. and Yemane, D. 2025. Results from initial breakpoint analyses for sardine recruitment and recruit/spawner ordered by increasing spawner biomass. IWS/2025/Sardine/WP5. 6pp.

Ecosystem-based Fisheries Management

Primary papers

EBFM/P1: Cochrane, K. 2025. Key questions to the panel on approaches to setting harvest levels for low trophic level species that take account of the needs of dependent predators and the wider ecosystem. IWS/2025/EBFM/P1. 2 pp.

EBFM/P2: Bergh, M. 2025. A proposal to adjust natural mortality to obtain SY:B relationships consistent with Smith *et al* (2011). IWS/2025/EBFM/P2. 10 pp.

EBFM/P3: Cochrane, K. and Coetzee, J. 2025. Some initial thoughts on the potential use of MICE for informing targets or thresholds for harvest rates to take into account impacts on predators of fishing on small pelagics. IWS/2025/EBFM/P3. 9 pp.

EBFM/P4: de Moor, C.L. 2025. Variability about Density Dependent Natural Mortality. IWS/2025/EBFM/P4. 4 pp.

Background papers

EBFM/BG1: Cochrane, K. 2025. Considering appropriate harvest levels for LTL species that take account of the need of dependent predators and the wider ecosystem. IWS/2025/EBFM/BG1. 15 pp.

EBFM/BG2: Merkle, D., Coetzee, J. and Shannon, L. 2025. Round herring bonanza: Short-term relief or long-term disaster? IWS/2025/EBFM/BG2. 1 pp.

EBFM/BG3: Schiano, S., Nesslage, G.M., Drew, K., Schueller, A.M., Woodland, R.J. and Wilberg, M.J. 2024. Evaluation of alternative harvest policies for striped bass and their prey, Atlantic menhaden. IWS/2025/EBFM/BG3. 23 pp.

Presentations

EBFM/Pres1: Cochrane, K. 2025. Chair's Summary of the Discussions and Recommendations of the DFFE Ecosystem Inputs to Management Task Group. IWS/2025/EBFM/Pres1. 11 slides.

EBFM/Pres2: Bergh, M. 2025. A proposal to adjust natural mortality to obtain SY:B relationships consistent with Smith *et al* (2011). IWS/2025/EBFM/Pres2. 11 slides.

EBFM/Pres3: Cochrane, K. and Coetzee, J. 2025. Initial thoughts on the potential use of MICE. IWS/2025/EBFM/Pres1. 8 slides.

Survey

Primary papers

Survey/P1: Anon. 2025. List of key questions (requests) to the 2025 IWS Panel on DFFE pelagic and demersal fishery-independent surveys, together with brief summaries of the documents provided. IWS/2025/Survey/P1. 2 pp.

Survey/P2: Coetzee, J.C. and Shabangu, F.W. 2025. The importance of regular hydroacoustic biomass surveys off South Africa. IWS/2025/Survey/P2. 14 pp.

Survey/P3: Ross-Gillespie, A., Butterworth D.S. and Maphumulo, T. 2025. Hake projections with missing surveys under OMP2022. IWS/2025/Survey/P3. 10 pp.

Survey/P4: Landman, R. and Copeland, M. 2025. Industry concerns and requests to the IWS Panel. IWS/2025/Survey/P4. 3 pp.

Survey/P5: Somhlaba, S. 2025. Treatment of Uncertainty in Input Variables for a Net Present Value computation for a New Research Survey Vessel Investment Appraisal. IWS/2025/Survey/P5. 10 pp.

Background papers

Survey/BG1: Coetzee, J., Butterworth, D., de Moor, C. and Durholtz, D. 2024. Summary cost implications of not conducting a November 2024 small pelagic biomass survey with comments on the financial benefits of having conducted the 2024 demersal surveys. IWS/2025/Survey/BG1. 15 pp.

Survey/BG2: Fairweather, T.P.G. Singh, L. and Durholtz, D. 2025. DFFE Demersal Research Surveys. IWS/2025/Survey/BG2. 9 pp.

Survey/BG3: Ross-Gillespie, A., Butterworth D.S. and Maphumulo, T. 2025. Update to the hake Reference Case Operating Model with inclusion of the 2024 commercial data. IWS/2025/Survey/BG3. 14 pp.

Survey/BG4: Brandao, A. and Butterworth, D.S. 2025. Updated “Replacement Yield” model fit to catch and survey data for the South coast and for the West coast kingklip resources off South Africa to include data up to 2024. IWS/2025/Survey/BG4. 13 pp.

Survey/BG5: Ross-Gillespie, A. and Butterworth D.S. 2022. Robustness tests results for the hake OMP-2022 revision. IWS/2025/Survey/BG5. 22 pp.

Presentations

Survey/Pres1: Somhlaba, S. 2025. Vessel replacement appraisal. IWS/2025/Survey/Pres1. 13 slides.

Squid**Primary papers**

Squid/P1: Brandao, A. and Butterworth, D.S. 2025. List of key questions/requests for the panel and a brief summary of documents provided pertaining to the chokka squid resource. IWS/2025/Squid/P1. 2 pp.

Squid/P2: Brandao, A. and Butterworth, D.S. 2025. Excerpts from the 2024 IWS panel report pertaining to the chokka squid resource, together with responses. IWS/2025/Squid/P2. 4 pp.

Squid/P3: Brandao, A. and Butterworth, D.S. 2025. Available data for the assessment of the South African chokka squid (*Loligo reynaudii*) resource. IWS/2025/Squid/P3. 14 pp.

Squid/P4: Brandao, A. and Butterworth, D.S. 2025. Initial implementation of an assessment model for the South African chokka squid (*Loligo reynaudii*) resource. IWS/2025/Squid/P4. 25 pp.

Background papers

Squid/BG1: Lipinski LR, Mwangombe CH, Durholtz D, Yemane D, Githaiga-Mwicigi J and Sauer WHH. 2020. Age estimates of chokka squid *Loligo reynaudii* off South Africa and their use to test the effectiveness of a closed season for conserving this resource. African Journal of Marine Science. 42:4, 461-471. IWS/2025/Squid/BG1.

Squid/BG2: Lipiński MR, Mmethi MA, Yemane D, Githaiga-Mwicigi J and Sauer WHH. 2021. Are there long-term temporal trends of size composition and the length–weight relationship? Results for chokka squid *Loligo reynaudii* during the peak spawning season off the south coast of South Africa. African Journal of Marine Science 43: 227–238. IWS/2025/Squid/BG2.

Squid/BG3: Mwanangombe CH, Durholtz D, Yemane D, Githaiga-Mwicigi J and Sauer WHH, Lipiński MR. 2021. Growth rates of the chokka squid *Loligo reynaudii* D'Orbigny, 1845 (Cephalopoda: Myopsida: Loliginidae) off South Africa, investigated over two years. Folia Malacologia 29: 153–162. IWS/2025/Squid/BG3.

Squid/BG4: Glazer, J.P. 2024. Updated assessment of the squid resource, *Loligo reynaudii*. (also as FISHERIES/2019/MAR/SWG-SQ/06). 19 slides. IWS/2025/Squid/BG4

Presentations

Squid/Pres1: Mwicigi, J. 2025. A brief overview of the biology, growth rates and trends in size composition of chokka squid *Loligo reynaudi*. IWS/2025/SQUID/Pres1. 17 slides.

Working papers

Squid/WP1: Brandão, A. 2025. Further results for the initial implementation of an assessment model for the South African chokka squid (*Loligo reynaudii*) resource. IWS/2025/Squid/WP1. 22 pp.