

# SCIENTIFIC OUTPUT OF THE BRANCH: FISHERIES MANAGEMENT OF THE DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES

2012

This document lists the scientific output of the Fisheries Management branch for 2012, arranged by output category. As was the case in 2011, working group documents represent the bulk of the output, with the line function of the research component of the branch being to provide scientific advice for resource management. Presentations at conferences and symposia were fewer than in 2011, which is explained largely by the fact that there was no South African Marine Science Symposium in 2012. Publications in the peer-reviewed literature increased to 20, from 14 in 2011.

## Peer-reviewed Publications by research staff (shown in bold)

- Anderson RJ, Bolton JJ, Smit AJ, da Silva Neto D. 2012. The seaweeds of Angola: the transition between tropical and temperate marine floras on the west coast of southern Africa. *African Journal of Marine Science* 34: 1–13.
- Arendse DCZ, Pitcher GC. 2012. Growth and survival of the South African scallop *Pecten sulcicostatus* in suspended culture. *African Journal of Marine Science* 34: 181–186.
- Bolton JJ, Anderson RJ, Smit AJ, Rothman MD. 2012. South African kelp moving eastwards: the discovery of *Ecklonia maxima* (Osbeck) Papenfuss at De Hoop Nature Reserve on the south coast of South Africa. *African Journal of Marine Science* 34: 147–151.
- Greeff MR, Christison KW, Macey BM. 2012. Development and preliminary evaluation of a real-time PCR assay for *Haliotidica noduliformans* in abalone tissues. *Diseases of Aquatic Organisms* 99: 103–117.
- Groeneveld JC, Kirkman SP, Boucher M, Yemane D. 2012. From biomass mining to sustainable fishing — using abundance and size to define a spatial management framework for deep-water lobster. *African Journal of Marine Science* 34: 547–557.
- Grote B, Stenevik EK, Ekau W, Verheye HM, Lipiński MR, Hagen W. 2012. Spawning strategies and transport of early stages of the two Cape hake species, *Merluccius paradoxus* and *M. capensis*, in the southern Benguela upwelling system. *African Journal of Marine Science* 34: 195–204.
- Hamann MH, Grémillet D, Ryan PG, Bonadonna F, van der Lingen CD, Pichegru L. 2012. A hard-knock life: the foraging ecology of Cape cormorants amidst shifting prey resources and industrial fishing pressure. *African Journal of Marine Science* 34: 223–240.
- Herbert NA, Goodman M, Kunzmann A. 2012. The low O<sub>2</sub> avoidance strategy of the Cape silverside *Atherina breviceps* (Teleostei). *Marine and Freshwater Behaviour and Physiology* 45: 199–208.
- Hubbart B, Pitcher GC, Krock B, Cembella AD. 2012. Toxicogenic phytoplankton and concomitant toxicity in the mussel *Choromytilus meridionalis* off the west coast of South Africa. *Harmful Algae* 20: 30–41.
- Huisamen J, Kirkman SP, van der Lingen CD, Watson LH, Cockcroft VG, Jewell R, Pistorius PA. 2012. Diet of the Cape fur seal *Arctocephalus pusillus pusillus* at the Robberg Peninsula, Plettenberg Bay, and implications for local fisheries. *African Journal of Marine Science* 34: 431–441.
- Kirkman SP, Yemane D, Oosthuizen WH, Meÿer MA, Kotze PGH, Skrypzek H, Vaz Velho F, Underhill LG. 2012. Spatio-temporal shifts of the dynamic Cape fur seal population in southern Africa, based on aerial censuses (1972–2009). *Marine Mammal Science*. DOI: 10.1111/j.1748-7692.2012.00584.x. p 497–524.
- Moseley C, Grémillet D, Connan M, Ryan PG, Mullers RHE, van der Lingen CD, Miller TW, Coetzee JC, Crawford RJ, Sabarros P, Mcquaid CD, Pichegru L. 2012. Foraging ecology and ecophysiology of Cape gannets from colonies in contrasting feeding environments. *Journal of Experimental Marine Biology and Ecology* 422–423: 29–38.
- Næsje TF, Cowley PD, Diserud OH, Childs A-R, Kerwath SE, Thorstad E. 2012. Riding the tide? The influence of tide on estuary movement patterns of dusky kob, *Argyrosomus japonicus*. *Marine Ecology Progress Series* 460: 221–232.
- Pieterse A, Pitcher G, Naidoo P, Jackson S. 2012. Growth and condition of the Pacific oyster *Crassostrea gigas* at three climatically distinct South African oyster farms. *Journal of Shellfish Research* 31: 1061–1076.
- Pitcher GC. 2012. Harmful Algae – the requirement for species-specific information. *Harmful Algae* 14: 1–4.
- Reed C, Mackenzie K, van der Lingen CD. 2012. Parasites of South African sardines, *Sardinops sagax*, and an assessment of their potential as biological tags. *Bulletin of the European Association of Fish Pathologists* 32: 41–48.
- Sherley RB, Underhill LG, Barham BJ, Barham PJ, Coetzee JC, Crawford RJM, Dyer BM, Leshoro TM, Upfold L. 2012. Influence of local and regional prey availability on breeding performance of African penguins *Spheniscus demersus*. *Marine Ecology Progress Series* 473: 291–301.

- Solano-Fernández S, Attwood CG, Chalmers R, Clark BM, Cowley PD, **Fairweather T**, Fennessy ST, Götz A, Harrison TD, **Kerwath SE**, **Lamberth SJ**, Mann BQ, Smale MJ and Swart L. 2012. Assessment of the effectiveness of South Africa's marine protected areas at representing ichthyofaunal communities. *Environmental Conservation* 39: 1–12.
- Vaughan DB, **Christison KW**. 2012. Towards addressing the current state of confusion within the Hexabothriidae Price, 1942 (1908): *Callorhynchocotyle* Suriano and Incorvaia, 1982 (Monogenea: Hexabothriidae) re-visited, with the preliminary evaluation of novel parameters for measuring haptor armature of hexabothriids. *Zootaxa* 3229: 1–34.
- Winker H, **Kerwath SE**, CG. 2012. Application of alternative approaches to standardise CPUE for targeting behaviour in a multispecies handline fishery. *Fisheries Research* 139: 118–131.

## Book Chapters, Published Reports and Popular Articles

- da Silva C**, McCord M. 2012. Breede river Zambezi's, the facts, *Suid-Kaap Forum* 3, February 2012.
- da Silva C**, **West W**, **Wilke C**. 2012. Swordfish, sharks and satellite tags: Large Pelagic Voyage October 2011. *SANCOR Newsletter* 199: 1–3.
- Pitcher GC**, **Probyn TA**. 2012. Red tides and anoxia: an example from the southern Benguela current system. In: Pagou P, Hallegraeff G (eds), *Proceedings of the 14<sup>th</sup> International Conference on Harmful Algae*. International Society for the Study of Harmful Algae and Intergovernmental Oceanographic Commission of UNESCO. pp 175–177.
- West W**, **Kerwath S**. 2012. DAFF to host two scientific meetings for the Indian Ocean Tuna Commission. *Fish Eye News* September 2012.
- West W**, **Kerwath S**. 2012. Indian Ocean Tuna Commission meetings hosted by DAFF a great success. *Fish Eye News* October 2012.

## Contributions to Symposia and Conferences, and Public Presentations

- Brand MJ, Bolton JJ, **Macey BM**. 2012. *Ulva* grown in abalone effluent water as a potential substitute for fishmeal based feeds for the cultured abalone *Haliotis midae*. *27<sup>th</sup> Congress of the Phycological Society of Southern Africa, 17–22 June 2012, Qologha, South Africa*. (oral presentation)
- Bridges C, Klumpen E, Tavares C, Kraft J, Ritter A, Kinzler P, Schütt M, Novak T, **Auerswald L**, Knapp J, Atkinson RJ, Smith P, Naylor M. 2012. Consequences of ocean acidification for commercial species – global case studies of the effect on fisheries and aquaculture. *3<sup>rd</sup> International Symposium 'The Ocean in a High-CO<sub>2</sub> World', 24–27 September, Monterey, USA*. (oral presentation)
- Checkley D, Jones J, Minobe S, Oozeki Y, Rykaczewski R, **van der Lingen CD**, Moroff N, Kreiner A. 2012. Long-term fluctuations of sardine populations in relation to dominant modes of high latitude climate variability. *2<sup>nd</sup> International Symposium on Effects of Climate Change on the World's Oceans, 15–19 May 2012, Yeosu, South Korea*. (oral presentation)
- Christison KW**, **Macey BM**, Mouton AL. 2012. First reports of epizootic ulcerative syndrome from South Africa. *41<sup>st</sup> conference of the Parasitological Society of southern Africa, 1–3*

- October 2012, Bloemfontein, South Africa*. (oral presentation)
- Christison KW**. 2012. A case study for epizootic ulcerative syndrome in South Africa. *Yellowfish Working Group Conference, 14 April 2012, Stellenbosch, South Africa*. (oral presentation)
- Christison KW**. 2012. An overview of parasites and aquaculture in Sub-Saharan Africa. *41<sup>st</sup> conference of the Parasitological Society of southern Africa, 1–3 October 2012, Bloemfontein, South Africa*. (invited oral presentation)
- Cyrus MD, Bolton JJ, **Macey BM**, de Wet L. 2012. Evaluating the effectiveness of different feeding regimes using natural and artificial diets for the production of commercially valuable *Tripneustes gratilla*. *27<sup>th</sup> Congress of the Phycological Society of Southern Africa, 17–22 June 2012, Qologha, South Africa*. (oral presentation)
- da Silva C**, Escobar J, **Kerwath SE**, **Lamberth SJ**, McCord M, Sauer W, Weig T. 2012. Review of chondrichthyan fisheries in South Africa. *SANCOR presentation, 28 November 2012, Cape Town*. (oral presentation)
- da Silva C**, **Kerwath SE**, Attwood CG, **Wilke CG**. 2012. Notes on the spatiotemporal behaviour of smoothhound sharks *Mustelus mustelus* in relation to the Langebaan Lagoon Marine Protected Area. *4<sup>th</sup> Linefish Symposium, 16–20 April 2012, Langebaan, South Africa*. (oral presentation)
- da Silva C**, **Kerwath SE**, **Lamberth SJ**, **Wilke CG**. 2012. Sharks need parks. *Cape Nature – MPAs, estuaries and islands forum, 14 June 2012, Bettys Bay, South Africa*. (oral presentation)
- Guajaro JC, van der Merwe AB, **Kerwath S**, **Macey BM**, Bloomer P, Cowley P, Roodt-Wilding R. 2012. Molecular markers an important tool aiding the conservation and management of two important over-exploited **Sciaenidae** species: the dusky (*Argyrosomus japonicus*) and silver kob (*A. inodorus*). *4<sup>th</sup> Linefish Symposium, 16–20 April 2012, Langebaan, South Africa*. (oral presentation)
- Hatley G, Mouton AL, **Christison KW**. 2012. A practical model to detect disease emergence on abalone farms in South Africa. *8<sup>th</sup> International Abalone Symposium, 6–11 May 2012, Hobart, Tasmania*. (oral presentation)
- Huggett JA, Lamont T, **Coetzee J**, **van der Lingen**. 2012. Are changes in the copepod community on the Agulhas Bank over the last two decades mediated by environmental factors or predation? *American Geophysical Union Chapman Conference on the Agulhas System and its role in changing ocean circulation, climate and marine ecosystems, 8–12 October 2012, Stellenbosch, South Africa*. (poster presentation)
- Kerwath SE**, Winker H, Attwood CG. 2012. National Marine Linefish System: the largest geo-referenced biological data set in the world. *4<sup>th</sup> Linefish Symposium, 16–20 April 2012, Langebaan, South Africa*. (oral presentation)
- Kerwath SE**, Winker H, Booth AJ, Attwood CG. 2012. Assessments of five species of linefish based on surplus-production models. *4<sup>th</sup> Linefish Symposium, 16–20 April 2012, Langebaan, South Africa*. (oral presentation)
- Kirkman SP, **Yemane D**, Kathena J, Mafwila S, Nsiangango S, Samaai T, **Singh L**. 2012. Identifying and characterizing of demersal biodiversity hotspots in the Benguela Current Large Marine Ecosystem: its relevance in the light of global change. *2<sup>nd</sup> International Symposium on Effects of Climate Change on the World's Oceans, 15–19 May 2012, Yeosu, South Korea*. (oral presentation)
- Kirkman SP, **Yemane D**, Oosthuizen WH, Meijer MA, Kotze PGH, Skrypzeck H, Vaz Velho F, Underhill LG. 2012. Changes in

- distribution of the Cape fur seal *Arctocephalus pusillus pusillus* (Southern Africa, 1972–2009): considering the causes and consequences. *2<sup>nd</sup> International Symposium on Effects of Climate Change on the World's Oceans, 15–19 May 2012, Yeosu, South Korea*. (poster presentation)
- Lucas AJ, Kudela R, **Pitcher GC**, **Probyn TA**. 2012. Contrasting semi-diurnal and inertial modes of nutrient flux and coastal phytoplankton dynamics. *Ocean Sciences Meeting, 20–24 February 2012, Salt Lake City, Utah, USA*. (oral presentation)
- McCord M, **Lamberth S**, **Kerwath SE**, **Erasmus C**, **Wilke C**, **da Silva C**, Zweig T. 2012. Investigating habitat utilization patterns of Zambezi sharks (*Carcharhinus leucas*) and their prey, spotted grunter (*Pomadasys commersonnii*) and dusky kob (*Argyrosomus japonicus*) in the Breede River estuary. *4<sup>th</sup> Linefish Symposium, 16–20 April 2012, Langebaan, South Africa*. (oral presentation)
- Pitcher GC**, **Probyn TA**, **du Randt A**, Lamont T, Hutchings L. 2012. Climate change, harmful algal blooms and oxygen starved waters of the West Coast of South Africa. *First National Conference on Global Change, 26–28 November 2012, Boksburg, South Africa*. (poster presentation)
- Pitcher GC**. 2012. Predicting shellfish toxicity on the west coast of South Africa. *27<sup>th</sup> Congress of the Phycological Society of Southern Africa, 17–22 June 2012, Qologha, South Africa*. (oral presentation)
- van der Lingen CD**, Moloney CL. 2012. Climate change effects on Benguela sardine *Sardinops sagax*: From ecosystems to genes. *2<sup>nd</sup> International Symposium on Effects of Climate Change on the World's Oceans, 15–19 May 2012, Yeosu, South Korea*. (invited oral presentation)
- van der Lingen CD**. 2012. Effects of Agulhas System variability on small pelagic fish off South Africa. *American Geophysical Union Chapman Conference on the Agulhas System and its role in changing ocean circulation, climate and marine ecosystems, 8–12 October 2012, Stellenbosch, South Africa*. (invited oral presentation)
- van der Lingen CD**. 2012. The biological basis for hypothesizing multiple stocks of South African sardine *Sardinops sagax*. *MA-RE Annual Forum, 14 March 2012, Cape Town, South Africa*. (oral presentation)
- van der Lingen CD**. 2012. The biological basis for hypothesizing multiple stocks in South African sardine *Sardinops sagax*. *South African Council for Natural Scientific Professionals Networking Breakfast, 15 June 2012, Cape Town, South Africa*. (oral presentation)
- Vaughan DB, **Christison KW**. 2012. First record of the seriously pathogenic and potentially invasive monogenean *Neobenedenia melleni* from South Africa with serious implications for biosecurity and the marine aquaculture industry. *41<sup>st</sup> conference of the Parasitological Society of southern Africa, 1–3 October 2012, Bloemfontein, South Africa*. (poster presentation)
- West W**, **Kerwath S**, **Winker H**. 2012. Standardization of the catch per unit effort for albacore (*Thunnus alalunga*) for the South African tuna-pole (baitboat) fleet for the time series 1999–2010. *4<sup>th</sup> Linefish Symposium, 16–20 April 2012, Langebaan, South Africa*. (oral presentation)
- Wilke CG**, **Kerwath SE**, Götz A. 2012. The effect of barotrauma on five species of South African linefishes. *4<sup>th</sup> Linefish Symposium, 16–20 April 2012, Langebaan, South Africa*. (oral presentation)
- Winker H**, **Kerwath SE**, **Attwood CG**. 2012. Model-based standardization of multispecies catch and effort data from the South African linefishery. *4<sup>th</sup> Linefish Symposium, 16–20 April 2012, Langebaan, South Africa*. (oral presentation)
- Yemane D**, **Coetzee J**, **van der Lingen CD**, **Twatwa N**. 2012. Modelling the distribution of small pelagic fish species in the Southern Benguela using remotely-sensed data. *2<sup>nd</sup> International Symposium on Effects of Climate Change on the World's Oceans, 15–19 May 2012, Yeosu, South Korea*. (poster presentation)
- Yemane D**, Itambu J, Kirkman SP, Axelsen B, Samaai T. 2012. Investigation of common temporal trends in the major demersal fish populations in the Benguela Current Large Marine Ecosystem, 1985–2010. *2<sup>nd</sup> International Symposium on Effects of Climate Change on the World's Oceans, 15–19 May 2012, Yeosu, South Korea*. (poster presentation)
- Yemane D**, Samaai T, Kirkman SP. 2012. Assessing changes in distribution and range size of demersal fish species in the Benguela Current Large Marine Ecosystem in relation to long-term change in the environment. *2<sup>nd</sup> International Symposium on Effects of Climate Change on the World's Oceans, 15–19 May 2012, Yeosu, South Korea*. (oral presentation)
- Yemane D**, **Twatwa N**, **Coetzee J**. 2012. The performance of multiple species distribution models in replicating the distribution of small pelagic fish in the Southern Benguela. *2<sup>nd</sup> International Symposium on Effects of Climate Change on the World's Oceans, 15–19 May 2012, Yeosu, South Korea*. (poster presentation)

## Contributions to Workshops and Management and Scientific Bodies

- Cortes E, Domingo A, Miller P, Forselledo R, Mas F, Arocha F, Campana, S Coelho R, **da Silva C**, Holtzhausen H, Keene K, Lucena F, Ramirez K, Santos MN, Semba-Murakami Y, Yokawa K. 2012. Expanded ecological risk assessment of pelagic sharks caught in Atlantic pelagic longline fisheries. *ICCAT document SCRS/2012/167*.
- Jolly KA, **da Silva C**, Jarre A, Attwood CG. 2012. ICCAT working document: Spatial and temporal patterns in blue shark (*Prionace glauca*) catch in South African longline fisheries. *IOTC/2012/WPEB08/INF/23*.
- Jolly KA, **da Silva C**, Jarre A, Attwood CG. 2012. Spatial and temporal patterns in blue shark (*Prionace glauca*) catch in South African longline fisheries. IOTC working party document. *IOTC/2012/WPEB07/INF/32*.
- Kerwath SE**. 2012. Monitoring, Research and Management of the South African Linefishery. *5<sup>th</sup> Session of the Scientific Committee of the South Western Indian Ocean Fisheries Programme (SWIOFP), 27 Feb–1 March 2012, Cape Town, South Africa*.
- Shin YJ, Bundy A, Shannon LJ, Blanchard JL, Chuenpagdee R, Coll M, ..... Richardson AJ. 2012. Global in scope and regionally rich: an IndiSeas workshop helps shape the future of marine ecosystem indicators. *Reviews in Fish Biology and Fisheries* 22: 835–845. [**D Yemane** was a member of the IndiSeas Working Group, who contributed to this publication]
- van der Lingen CD**. 2012. Overview of (some) parasite research on South African small pelagic species. *Parasite Research on Small Pelagic Species (PRoSPS) Workshop, 4 May 2012, Cape Town, South Africa*. (oral presentation)
- van der Lingen CD**. 2012. The biological basis for hypothesizing multiple stocks in South African sardine *Sardinops sagax*. *DAFF Pelagic Ecological Risk Assessment review, 21–22 August 2012, Cape Town, South Africa*. (oral presentation)
- van der Lingen CD**. 2012. The biological basis for hypothesizing

multiple stocks in South African sardine *Sardinops sagax*. *South African Pelagic Fishing Industry Association (SAPFIA) Executive Committee meeting, 2 October 2012, Cape Town, South Africa*. (oral presentation)

**van der Lingen CD**. 2012. The present status of fisheries and aquaculture research in South Africa. *DAFF Stakeholder Workshop on an Agricultural, Forestry and Fisheries Research Policy and supporting Research Act(s)*, Pretoria, South Africa, 18–19 January 2012. (oral presentation)

**West WM, Kerwath SE, da Silva C, Wilke CG, Marsac F**. 2012. Horizontal and vertical movements of swordfish tagged with pop up-satellite transmitters in the south-west Indian Ocean, off South Africa. *IOTC Working Party on Billfish, IOTC-2012-WPB10-16, Cape Town September 2012*.

**Wilke CG**. 2012. An overview of South Africa's large pelagic fishery and research activities. *5<sup>th</sup> Session of the Scientific Committee of the South Western Indian Ocean Fisheries Programme (SWIOFP)*, 27 Feb–1 March 2012, Cape Town, South Africa.

## Unpublished Working Group Documents

**Auerswald L**. 2012. Ad-hoc report of the small invertebrates & seaweeds scientific working group (SISWSWG) for the sustainable management of the oyster fishery, in response to a request by Chief Directorate: Marine Resource Management *Fisheries/2012/JUL/SWG-SISW/01*.

**Auerswald L**. 2012. Record of decision (ROD): application for the amendment of farming right to include bloodworm (*Arenicola loveni*) – Roman Bay Seafarm (Pty) Ltd. *Fisheries/2012/DEC/SWG-SISW/02*.

**Coetzee JC** 2012. Comment on the Draft Biodiversity Management Plan for *Spheniscus demersus*. *Fisheries/2012/SEP/SWG-PEL/52*.

**Coetzee JC** 2012. Permit conditions Mossel Bay – request for relaxation. *Fisheries/2012/JUL/SWG-PEL/36*.

**Coetzee JC, Butterworth DS**. 2012. Further information provided by the Small Pelagic Scientific Working Group in respect of the IFFO FISHERY ASSESSMENT REPORT of anchovy and redeye round herring. *Fisheries/2012/FEB/SWG-PEL/11*.

**Coetzee JC, de Moor CL, van der Lingen C, Moseley C, Butterworth DS**. 2012. Input from the SWG-PEL into the 2012 Small Pelagic ERA review process – revisiting risks identified during the 2009 ERA; evaluating progress and re-assessing their priorities. *Fisheries/2012/AUG/SWG-PEL/45*.

**Coetzee JC, Merkle D**. 2012. A new method for calculating proportion and weight of 1-yr old anchovy in the November surveys. *Fisheries/2012/FEB/SWG-PEL/08*.

**Coetzee JC, Merkle D**. 2012. The appropriateness of Cape Agulhas as the boundary between the two putative sardine stocks. *Fisheries/2012/FEB/SWG-PEL/06*.

**Coetzee JC** (with input from SWG-PEL members). 2012. Ad hoc recommendation of the small pelagic scientific working group for the sustainable management of small pelagic resources for an increase in the 2012 additional season sardine total allowable bycatch (TAB). *Fisheries/2012/SEP/SWG-PEL/46*.

**Coetzee JC** (with input from SWG-PEL members). 2012. DG: Fisheries Management – general submission: Consent requested in respect of using the MFV Compass Challenger to conduct the 2012 pelagic recruit survey as a contingency measure in the event that the SAS Africana is unable to sail by the 12th June 2012. *Fisheries/2012/MAY/SWG-PEL/25*.

**Coetzee JC** (with input from SWG-PEL members). 2012. Final

TAC recommendation of the small pelagic scientific working group for the sustainable management of small pelagic resources for the season 2012. *Fisheries/2012/JUL/SWG-PEL/37*.

**Coetzee JC** (with input from SWG-PEL members). 2012. Initial recommendation of the small pelagic scientific working group for the sustainable management of small pelagic resources for the season 2013. *Fisheries/2012/NOV/SWG-PEL/68*.

**Coetzee JC** (with input from SWG-PEL members). 2012. Recommendation of the small pelagic scientific working group for the sustainable management of small pelagic resources for an interim increase in the 2012 normal season anchovy TAC. *Fisheries/2012/JUL/SWG-PEL/22*.

**Coetzee JC**. 2012. Dassen Island Nature Reserve Management Plan. SWG comments and feedback. *Fisheries/2012/FEB/SWG-PEL/12*.

**Coetzee JC**. 2012. Dyer Island Nature Reserve Complex Management Plan. SWG comments and feedback. *Fisheries/2012/FEB/SWG-PEL/13*.

**Coetzee JC**. 2012. Oceana Brands Limited: Review of permit conditions in respect of continuation of the pelagic trawl experiment. *Fisheries/2012/MAY/SWG-PEL/26*.

**Coetzee JC**. 2012. Re-analyses of anchovy WLF data to estimate proportion at age 1. *Fisheries/2012/APRIL/SWG-PEL/18*.

**Coetzee JC**. 2012. Recommendation of the small pelagic scientific working group in response to a request by Oceana Brands Ltd. to extend their permit to conduct a small pelagic experiment by means of the pelagic trawl method. *Fisheries/2012/JUL/SWG-PEL/23*.

**Coetzee JC**. 2012. Recommendation of the small pelagic scientific working group in response to a request by Pioneer Fishing West Coast Ltd. to extend their permit to conduct a small pelagic experiment by means of the pelagic trawl method. *Fisheries/2012/JUL/SWG-PEL/24*.

de Moor CL, Butterworth DS, **Coetzee JC**. 2012. Correction to estimate of 2012 recruitment due to delayed survey start date. *Fisheries/2012/JUL/SWG-PEL/30*.

de Moor CL, **Coetzee J, Durholtz D, Merkle D, van der Westhuizen JJ**, Butterworth DS. 2012. A record of the generation of data used in the 2012 sardine and anchovy assessments. *Fisheries/2012/AUG/SWG-PEL/41*.

de Moor CL, **Coetzee JC**, Butterworth DS. 2012. Follow up to the International Review Panel Report for the 2011 International Fisheries Stock Assessment Workshop. *Fisheries/2012/FEB/SWG-PEL/05*.

de Moor CL, **Coetzee JC**, Butterworth DS. 2012. Sardine operating model assumptions regarding the November survey. *Fisheries/2012/FEB/SWG-PEL/04*.

de Moor CL, **Coetzee JC**. 2012. Objectives for the Management of the South African pelagic fishery for anchovy and sardine, using OMP-13. *Fisheries/2012/FEB/SWG-PEL/03*.

**Fairweather T, Glazer J, Durholtz D**. 2012. Agulhas sole data document for 2013 TAC recommendation. *Fisheries/2012/OCT/SWG-DEM/24*.

**Fairweather T**. 2012. Research survey hake data – 2012 Update. *DAFF/2012/OCT/SWG-DEM/20*.

**Glazer J**. 2012. An index of abundance for Area1+2 West Coast rock lobster. *Fisheries/2012/JUL/SWG-WCRL/14*.

**Glazer J**. 2012. Area-disaggregated standardized CPUE indices in the West Coast rock lobster trapboat fishery. *Fisheries/2012/JUL/SWG-WCRL/13*.

**Glazer J**. 2012. Standardized CPUE indices in the West Coast rock lobster hoopnet fishery. *Fisheries/2012/JUL/SWG-WCRL/12*.

Johnston SJ, Butterworth DS, **Glazer JP**, Brandão. 2012. OMP

- 2011 to be used for setting TACs for the West Coast rock lobster fishery for the 2011+ seasons. *Fisheries/2012/JUL/SWG-WCRL/2*.
- Johnston SJ, Butterworth DS, **Glazer JP**, Brandão. 2012. OMP 2011 to be used for setting TACs for the West Coast rock lobster fishery for the 2011+ seasons. *Fisheries/2012/JUL/SWG-WCRL/10*.
- Kerwath SE, Smith C, da Silva C, Wilke CG, Singh L**. 2012. South Africa's National Plan of Action (NPOA) for the Conservation and Management of Sharks 2013. Draft management plan published for public comment. 50 pp. Large Pelagics and Sharks Scientific Working Group Document 2012. *LPSSWG/NPOA task group 2012/1*.
- Maharaj G**. 2012. Estimates of compliance policing effort. *Fisheries/2012/JUL/SWG-AB/03*.
- Maharaj G, Mackenzie A**. 2012. A short note on preliminary results of the joint DAFF-industry extractive survey in Zones B and C. *Fisheries/2012/AUG/SWG-AB/07*.
- Maharaj G, Mackenzie A**. 2012. Data updates and decision rules for Zones E, F and G. *Fisheries/2012/AUG/SWG-AB/08*.
- Maharaj G, Mackenzie A**. 2012. Preliminary results of experimental fishing in False Bay for the 2010/11 and 2011/12 seasons. *Fisheries/2012/AUG/SWG-AB/12*.
- Maharaj G, Mackenzie A**. 2012. Summary of commercial and FIAS data updates for the abalone fishery in Zones A-D in 2012. *Fisheries/2012/JUL/SWG-AB/01*.
- Maharaj G, Mackenzie A**. 2012. Summary of confiscations numbers and size (catch-at-age) data for the abalone fishery in Zones A-D in 2012. *Fisheries/2012/JULY/SWG-AB/02*.
- Maharaj G, Mackenzie A**, Malick I. 2012. A note on poaching confiscations from Zones E, F and G. *Fisheries/2012/AUG/SWG-AB/10*.
- Merkle D, Coetzee JC, Mushanganyisi K, Rademan J**. 2012. Small scale hydro-acoustic surveys 2012. *Fisheries/2012/NOV/SWG-PEL/ICTT/09*.
- Merkle D, Coetzee JC, Rademan J**. 2012. Update on small scale island surveys 2011. *Fisheries/2012/FEB/SWG-PEL/09*.
- Merkle D, Coetzee JC**. 2012. The potential bias in small boat survey estimates around penguin breeding colonies as a consequence of uncertainty in fish size. *Fisheries/2012/APRIL/SWG-PEL/21*.
- Mhlongo N, Coetzee JC, Merkle D, Phillips M**. 2012. Results of the 2012 pelagic recruitment survey. *Fisheries/2012/JUL/SWG-PEL/29*.
- Shabangu F, Coetzee JC, Merkle D, Mushanganyisi K, Phillips M**. 2012. Results of the 2012 spawner biomass survey. *Fisheries/2012/NOV/SWG-PEL/66*.
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