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

#### 2011

This document lists the scientific output of the Fisheries Management branch for 2011, arranged by output category. Given that the line function of the research component of the branch is to provide scientific advice for resource management, it follows that the bulk of the scientific output is in the form of working group documents, with the working groups being the forum for the formulation and dissemination of scientific advice. Hence 92 documents that contain scientific findings are included in this listing. The scientists have also disseminated their work to the broader scientific community, however, through 62 contributions at symposia and conferences. Twenty six of these were given at the 14th Southern African Marine Science Symposium in Grahamstown. The focus on line function research limits the potential for publication of novel research in the peer-reviewed literature, but nevertheless the branch's scientists published 14 papers of this type in 2011.

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

- Atkinson LJ, **Leslie RW**, Field JG, Jarre A. 2011. Changes in demersal fish assemblages on the west coast of South Africa: 1986–2009. *African Journal of Marine Science* 33: 157–170.
- Attwood CG, Petersen SL, **Kerwath SE**. 2011. Bycatch in South Africa's inshore trawl fishery as determined from observer records. *ICES Journal of Marine Science* 68: 2163–2174.
- Bolton JJ, Andreakis N, Anderson RJ. 2011. Molecular evidence for three separate cryptic introductions of the red seaweed *Asparagopsis* (Bonnemaisoniales, Rhodophyta) in South Africa. *African Journal of Marine Science* 33: 263–271.
- **Christison KW**, Mouton AL. 2011. Parasite succession on marine fish in a pilot scale sea cage culture system in South Africa. *Journal of the South African Veterinary Association* 82: 265.
- García-Vásquez A, Hansen H, **Christison KW**, Rubio-Godoy M, Bron JE, Shinn AP. 2011 Description of three new species of *Gyrodactylus* von Nordmann, 1832 (Monogenea) parasitising *Oreochromis niloticus niloticus* (L.) and *O. mossambicus* (Peters) (Cichlidae). *Acta Parasitologica* 56: 20–33.
- Götz A, Kerwath SE, Attwood CG, Sauer WHH. 2011. An alternative method for estimating the status of resident reef fish stocks, based on differential fishing effort across a marine reserve boundary. African Journal of Marine Science 33: 107–113.
- Grantham HS, Game ET, Lombard AT, Hobday AJ, Richardson AJ, Beckley LE, Pressey RL, Huggett JA, Coetzee JC, van der Lingen CD, Petersen SL, Merkle D, Possingham HP. 2011. Accommodating dynamic oceanographic processes and pelagic diversity in marine conservation planning. *PLoS ONE* 6: e16552. doi:10.1371/journal.pone.0016552. 16 pp.
- Kreiner A, **Yemane D**, Stenevik EK, Moroff NE. 2011. The selection of spawning location of sardine (*Sardinops sagax*) in the northern Benguela after changes in stock structure and environmental conditions. *Fisheries Oceanography* 20: 560–569.

- **Macey BM**, **Christison KW**, Mouton A. 2011. *Halioticida noduliformans* isolated from cultured abalone (*Haliotis midae*) in South Africa. *Aquaculture* 315: 187–195.
- Mbokane EM, **Christison KW**. 2011. Spatial distribution of three stages of *Diplectanum oliveri* on the gills of *Argyrosomus japonicus* (dusky kob). *Journal of the South African Veterinary Association* 82: 268–269.
- **Pitcher GC**, Krock B, Cembella AD. 2011. Accumulation of diarrhetic shellfish poisoning toxins in the oyster *Crassostrea gigas* and the mussel *Choromytilus meridionalis* in the southern Benguela ecosystem. *African Journal of Marine Science* 33: 273–281.
- Pitcher GC, Probyn TA. 2011. Anoxia in southern Benguela during the autumn of 2009 and its linkage to a bloom of the dinoflagellate *Ceratium balechii*. Harmful Algae 11: 23–32.
- Raemaekers S, Hauck M, Bürgener M, **Mackenzie A**, **Maharaj G**, Plagányi ÉE, Britz PJ. 2011. Review of the causes of the rise of the illegal South African abalone fishery and consequent closure of the rights-based fishery. *Ocean and Coastal Management* 54: 433–445.
- Von der Heyden S, Bowie RCK, **Prochazka K**, Bloomer P, Crane NL, Bernardi G. 2011. Phylogeographic patterns and cryptic speciation across oceanographic barriers in South African intertidal fishes. *Journal of Evolutionary Biology* 24: 2505–2519.

### Book Chapters, Published Reports and Popular Articles

Downey N, Webber D, Roberts M, Smale M, Sauer W, **Singh L**. 2011. The use of acoustic telemetry in South African squid research (2003–2010). Chapter 20. In: Krejcar O (ed.), *Modern* 

- telemetry. Rijeka, Croatia: InTech Europe, University Campus. pp 423–440. [Published online 5 October 2011]
- Griffiths C, **Christison KW**. 2011. Flatworms, Phylum Platyhelminthes. In: Picker M, Griffiths C (eds), *Alien and invasive animals: a South African perspective*. Cape Town, South Africa: Struik Nature. pp 202–204.
- Miller TW, van der Lingen CD, Brodeur R, Omori K, Hamaoaka H, Isobe T. 2011. Understanding what drives food web structure in marine pelagic ecosystems. In: Omori K, Guo X, Yoshie N, Fujii N, Handoh IC, Isobe A, Tanabe S (eds), Interdisciplinary studies on environmental chemistry. Vol. 5. Marine environmental modeling & analysis. Japan: TERRAPUB. pp 125–131.
- Sink K, Holness S, Harris L, Majiedt P, Atkinson L, Robinson T, Kirkman S, Hutchings L, Leslie R, Lamberth S, Kerwath S, von der Heyden S, Lombard S, Taljaard S, Weerts S, Cowley P, Awad A, Halpern B, Grantham H, Wolf T. 2011. National biodiversity assessment 2011. Vol. 4. Marine and coastal component. Technical Report, South African National Biodiversity Institute.
- van der Lingen CD, Coetzee JC, Hutchings L. 2011. Causes and effects of changes in the distribution of anchovy and sardine in shelf waters off South Africa. In: Zietsman L (ed.), Observations on environmental change in South Africa. Stellenbosch: SUN MeDIA. pp 252–257.
- van der Lingen CD, Miller TW. 2011. Trophic dynamics of pelagic nekton in the southern Benguela Current ecosystem: calibrating trophic models with stable isotope analysis. In: Omori K, Guo X, Yoshie N, Fujii N, Handoh IC, Isobe A, Tanabe S (eds), Interdisciplinary studies on environmental chemistry. Vol. 5. Marine environmental modeling & analysis. Japan: TERRAPUB. pp 85–94.

#### **Theses/Dissertations/Tertiary Projects**

- Mhlekwa N, **Somhlaba S**, Mkhanda G. 2011. Measuring bias of the declared total bins by vessel skippers and those by port monitors. National diploma project, Cape University of Technology, Cape Town, South Africa.
- Ngcupe N, **Somhlaba S**, Makhanda G. 2011. Comparing the average landed weight that is estimated by port monitors to the average weight recorded by processing plant. National diploma project, Cape University of Technology, Cape Town, South Africa.

## Contributions to Symposia and Conferences, and Public Presentations

- **Auerswald L**, Meyer B. 2011. The physiology of overwintering Antarctic krill. 14<sup>th</sup> Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (poster presentation)
- Barnard P, Matiga M, Morakile G, **Githaiga-Mwicigi JM**. 2011. DAFF minister's speeches and speaking notes. *Climate Change and Response Expo (CCR Expo), United Nations Framework Convention on Climate Change, 17<sup>th</sup> Conference of Parties (UNFCCC: COP17). 28 November–9 December 2011, Durban, South Africa.*
- Barnard P, Morakile G, **Githaiga-Mwicigi JM**, Mampholo K, Mphumbude P (eds). 2011. Book of Abstracts. DAFF Side Events. Climate Change and Response Expo (CCR Expo), United Nations Framework Convention on Climate Change,

- 17th Conference of Parties (UNFCCC: COP17). 28 November –9 December 2011, Durban, South Africa.
- Bernard A, Götz A, **Kerwath SE**, **Wilke C**. 2011. The development of a volunteer-based long-term monitoring programme for subtidal reefs around the Cape Peninsula. 14<sup>th</sup> Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (oral presentation)
- Christison KW, Hatley G, Macey BM, Mouton AL. 2011. A short history of abalone tubercle mycosis in South Africa. *Joint Symposium of the Zoological Society of southern Africa and the Parasitological Society of southern Africa*, 10–13 *July 2011, Stellenbosch, South Africa*. (oral presentation)
- Christison KW, Hatley G, Macey BM, Mouton AL. 2011. Epidemiology and management of Halioticida noduliformans infections on South African abalone farms. Annual Conference and Exposition of the World Aquaculture Society, 6–10 June 2011, Natal, Brazil. (oral presentation)
- Christison KW, Joubert CJH. 2011. Treating monogeneans in aquaculture in South Africa: using 'off-label' Praziquantel formulations as bath treatments for *Diplectanum oliveri* in dusky kob culture systems. *Joint Symposium of the Zoological Society of southern Africa and the Parasitological Society of southern Africa*, 10–13 July 2011, Stellenbosch, South Africa. (oral presentation)
- Coetzee J, van der Lingen CD, Hutchings L. 2011. Was the sardine eastward shift an ecological experiment that failed? 14<sup>th</sup> Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (oral presentation)
- Cyrus M, Bolton J, **Macey BM**, de Wet L. 2011. The potential for echinoculture in South Africa: The development of a suitable formulated feed for *Tripneustes gratilla*. *Joint Symposium of the Zoological Society of southern Africa and the Parasitological Society of southern Africa*, 10–13 July 2011, Stellenbosch, South Africa. (oral presentation)
- Cyrus M, Bolton JJ, **Macey BM**, de Wet L. 2011. Development of an artificial diet for the production of export quality gonads from the sea urchin *Tripneustes gratilla*. *Annual Conference and Exposition of the World Aquaculture Society, 6–10 June 2011, Natal, Brazil*. (oral presentation)
- da Silva C, Kerwath SE, Attwood CG, Thorstad EB, Cowley PD, Økland, Wilke CG, Næsje TF. 2011. Long-term movement patterns of the exploited shark species Smoothhound shark Mustelus mustelus in and around an area closed to fishing. Southern African Shark and Ray Research Symposium, KZN Sharks Board, 8–10 February 2011, Umhlanga Rocks, South Africa. (oral presentation)
- da Siva C, Kerwath SE, Wilke CG, Meyer M, Lamberth SJ. 2011. A note on the first documented southern transatlantic migration of a blue shark (Prionace glauca) tagged off South Africa. 14<sup>th</sup> Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (poster presentation)
- da Silva C, Kerwath SE, Wilke CG, Lamberth SJ, Britz F, Goosen M, Erasmus C, Jekequ N, Magazi B, Mbande S, Mooi G, Louw A, Sassman L, Snyders Y, Sotyato L, Tarr R, Wiliamson C. 2011. Fishing for sharks- putting the fisheries back into shark research. Southern African Shark and Ray Research Symposium, KZN Sharks Board, 8–10 February 2011, Umhlanga Rocks, South Africa. (oral presentation)
- De Lange S, **Christison KW**, Simon CA. 2011. *Polydora*-type infestations on farmed Pacific oyster (*Crassostrea gigas* Thunberg) in South Africa and Namibia: prevalence, intensity

- and identification. *Joint Symposium of the Zoological Society of southern Africa and the Parasitological Society of southern Africa, 10–13 July 2011, Stellenbosch, South Africa.* (poster presentation)
- Evers-King H, Bernard S, Matthews M, Pitcher G, Probyn T, Robertson-Lain L, Smith M. 2011. Harmful Algal Bloom Events in the Southern Benguela: Comparison of CoastColour & Regional Algorithms. 3<sup>rd</sup> CoastColour User Consultation Meeting, 19–20 October 2011, Lisbon, Portugal. (poster presentation)
- Foord CJ, **Pitcher GC**, **Probyn TA**, Majangaza M, Ngomane PA. 2011. Management of biotoxin threats to the molluscan shellfish aquaculture industry in South Africa. *Molluscan Shellfish Safety (ICMSS)*, *June 12–17 2011*, *Charlottetown, Prince Edward Island, Canada*. (poster presentation)
- **Geja Y**, van der Lingen CD. 2011. Spatio-temporal distribution of catches of redeye round herring (*Etrumeus whiteheadi*) by the small pelagic fishery off South Africa's coast. 14<sup>th</sup> Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (poster presentation)
- Githaiga-Mwicigi JM, Prochazka K, van Dalsen AP. 2011.

  Managing fisheries in a changing climate. Building resilience to change. Exhibition for branch Fisheries. Climate Change and Response Expo (CCR Expo), United Nations Framework Convention on Climate Change, 17th Conference of Parties (UNFCCC: COP17). 28 November–9 December 2011, Durban, South Africa. (poster presentation)
- Githaiga-Mwicigi JM, Prochazka K, van Dalsen AP. 2011.

  Managing fisheries in a changing climate. Fostering healthy ecosystems to support fisheries resources. Exhibition for Branch Fisheries. Climate Change and Response Expo (CCR Expo), United Nations Framework Convention on Climate Change, 17th Conference of Parties (UNFCCC: COP17). 28 November–9 December 2011, Durban, South Africa. (poster presentation)
- Githaiga-Mwicigi JM, Roberts MJ, Lucas M. 2011. So what makes it too dark for squid to spawn? The constituents of nepheloid layers occurring across the Agulhas Bank, southern Africa. 14th Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (poster presentation)
- Götz A, **Kerwath SE**, Attwood CG, Winker H. 2011. An alternative method for estimating the status of resident reef fish stocks, based on differential fishing effort across a marine reserve boundary. 14th Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (oral presentation)
- Götz A, **Kerwath SE**, Bernard ATF, Palmer R. 2011. The application of Remotely Operated Vehicles (ROVs) for monitoring of subtidal reef biota. *Western Indian Ocean Marine Science Association Symposium*, 24–29 October 2011, Mombasa, Kenya. (poster presentation)
- Greeff M, **Macey BM**, Christison KW. 2011. The development, optimisation and evaluation of DNA-based molecular methods used to diagnose abalone tubercle mycosis (ATM) caused by *Halioticida noduliformans* in South African abalone, *Haliotis midae. Journal of the South African Veterinary Association 82:* 264–273. 39<sup>th</sup> Annual Congress of the Parasitological Society of Southern Africa (PARSA), 10–13 October 2010, Drakensville Resort, South Africa. (published conference abstract)
- Hampton SL, Moloney CL, Bloomer P, **van der Lingen CD**. 2011a. Investigating stock structure in Sardinops sagax in the southern Benguela region using microsatellites. *14<sup>th</sup>*

- Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (poster presentation)
- Hampton SL, Moloney CL, Bloomer P, van der Lingen CD. 2011b. Investigating stock structure in Sardinops sagax in the southern Benguela region using microsatellites. World Conference on Marine Biodiversity, September 2011, 27/0048, Aberdeen, Scotland. (digital object presentation)
- Kainge P, Yemane D, Mafwila S, Axelsen B, Estevao V, Cloete R, litembu J, Kathena J, Singh L. 2011. Identification of potential indicator demersal species of climate related changes in the BCLME region: 1985–2010. NansClim Midterm meeting, 14–16 March 2011, Cape Town, South Africa. (oral presentation)
- **Kerwath SE**, Götz A, Attwood CG, Winker H. 2011. Adult and larval spill-over cause a two step increase in catch rates adjacent to a marine protected area. *Western Indian Ocean Marine Science Association Symposium*, 24–29 October 2011, *Mombasa, Kenya*. (oral presentation)
- Kerwath SE, Götz A, Samaai T, Da Silva C, Wilke CG. 2011. An investigation of the offshore reefs on the Agulhas Bank. 14<sup>th</sup> Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (poster presentation)
- Kirkman SP, Kathena J, Mafwila S, Nsiangango S, Samaai T, **Yemane D**. 2011. Identifying and characterizing of biodiversity hotspots in the BCLME: its relevance in the light of climate change. *NansClim Mid-term meeting*, 14–16 March 2011, Cape Town, South Africa. (oral presentation)
- Kraft J, **Auerswald L**, Bridges C. 2011. Impact of ocean acidification on decapod physiology preliminary results. *14<sup>th</sup> Southern African Marine Science Symposium*, *4*–7 April 2011, Grahamstown, South Africa. (poster presentation)
- Kreiner A, **Yemane D**, Stenevik EK, Moroff NE. 2011. The selection of spawning location of sardine (Sardinops sagax) in the northern Benguela after changes in stock structure and environmental conditions. *NansClim Mid-term meeting*, 14–16 *March 2011*, *Cape Town*, *South Africa*. (oral presentation)
- Kreiner A, **Yemane D**. 2011. Variability in copepod communities in the northern Benguela upwelling region from 2000 to 2010. *NansClim Mid-term meeting*, 14–16 March 2011, Cape Town, South Africa. (oral presentation)
- Lobo-Petersen JLF, Sparks C, **Goodman M**. 2011. Productivity and nutritional value of the rotifer Brachionus plicatilis fed five microalgal diets. *14<sup>th</sup> Southern African Marine Science symposium*, *4*–7 April 2011, Grahamstown, South Africa. (poster presentation)
- Louw DC, **Yemane D**. 2011. A century of phytoplankton monitoring in the northern Benguela with emphasis on the last decade and its relationship to climate change. *NansClim Mid-term meeting*, 14–16 March 2011, Cape Town, South Africa. (oral presentation)
- Macey B, Christison KW, Greeff M. 2011. Development of a quantitative real-time pcr assay for detecting *Halioticida noduliformans* in South African abalone *Haliotis midae*. Annual Conference and Exposition of the World Aquaculture Society, 6–10 June 2011, Natal, Brazil. (oral presentation)
- Macey B, Christison KW, Greeff M. 2011. Development, optimization and evaluation of a real-time pcr assay for detecting Halioticida noduliformans in South African abalone, Haliotis midae. 14th Southern African Marine Science symposium, 4–7 April 2011, Grahamstown, South Africa. (oral presentation)
- Madjiedt P, **Kerwath SE**, Mann BQ, Sink K. 2011. The South African linefish website project. *14<sup>th</sup> Southern African*

- Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (oral presentation)
- Mafwila SK, Kathena J, Samaai T, **Yemane D**, **Singh L**, Axelsen BE, Nsiangango SE, Cloete R, Kainge P, Johnsen E. 2011. Spatio-temporal trend in diversity of the demersal fish community in the BCLME: a comparative approach. *NansClim Mid-term meeting14–16 March 2011, Cape Town, South Africa*. (oral presentation)
- **Mbokane E, Christison KW**. 2011. Spatial distribution of three stages of *Diplectanum oliveri* on the gills of *Argyrosomus japonicus* (Dusky Kob). 10<sup>th</sup> Conference of the Aquaculture Association of southern Africa, 12–17 September 2011, Mangochi, Lake Malawi, Malawi (poster presentation).
- McGregor ES, Jarre A, van der Lingen CD. 2011. Assessing the implementation efficacy of EAF in the South African sardine fishery. 14<sup>th</sup> Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (oral presentation)
- Mushanganyisi K, Coetzee JC, Twatwa NM, van der Lingen CD. 2011. Monthly pelagic fish (acoustic) abundance estimates along (the) SHBML transect. 14<sup>th</sup> Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (poster presentation)
- Ndjaula HON, Gerow K, van der Lingen CD, Moloney CL, Jarre A. 2011. Establishing a baseline for evaluating population and condition dynamics of sardine (Sardinops sagax) in the Southern Benguela. 14<sup>th</sup> Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (oral presentation)
- Phillips M, **Twatwa N**, **Coetzee JC**. 2011. Using school descriptors to aid species identification during hydroacoustic surveys. 14<sup>th</sup> Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (poster presentation)
- Reed CC, Mackenzie K, **van der Lingen CD**, Linde R, Morris TC. 2011. Parasites as biological tags for South African sardines. 8<sup>th</sup> International Symposium of Fish Parasites, 26–30 September 2001, Vina del Mar, Chile. (oral presentation)
- Reed CC, Mackenzie K, van der Lingen CD. 2011. Parasites as biological tags for South African sardine. 14<sup>th</sup> Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (poster presentation)
- Roux JP, van der Lingen CD, Gibbons MJ, Moroff N, Shannon LJ, Cury P. 2011. Jellification of marine ecosystems: Lessons from the Benguela. 8<sup>th</sup> International William R and Lenore Mote Symposium, "Species Interactions in Marine Communities: the Invisible Fabric of Nature", 8–10 November 2011, Sarasota, Florida, USA. (invited oral presentation)
- Samaai T, Atkinson L, Mafwila S, Nsiangango S, Kainge P, Kirkman SP, Singh L, Yemane D. 2011. Assessing and identification of major turning points in the demersal fish communities of the BCLME. NansClim Mid-term meeting, 14–16 March 2011, Cape Town, South Africa. (oral presentation)
- Scholtz R, Bolton JJ, **Macey BM**. 2011. The effect of different phytoplankton feeds on development and settlement of *Tripneustes gratilla* (L) larvae under laboratory conditions. *Joint Symposium of the Zoological Society of southern Africa and the Parasitological Society of southern Africa*, 10–13 July 2011, Stellenbosch, South Africa. (oral presentation)
- **Shabangu FW**. 2011. Experimentally-established correction factors for signal attenuation by air bubbles in bad weather conditions during acoustic surveys. 14<sup>th</sup> Southern African Marine

- Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (poster presentation)
- Shabangu FW. 2011. Fish density estimation by sound: from drop keels to hulls and otherwise. SANCOR presentation, 26 September 2011, Foretrust Building, Cape Town, South Africa. (oral presentation)
- Smith M, Kudela R, **Pitcher G**, Pizarro G, Roy S, Starr M, Bernard S. 2011. harmful algal blooms and ocean colour: comparison of MERIS FR products in application to *Alexandrium and Pseudo-nitzschia blooms in four marine ecosystems*. 3rd CoastColour User Consultation Meeting, 19–20 October 2011, Lisbon, Portugal. (poster presentation)
- **Somhlaba S**. 2011. Hake long line fishery and related issues in the development of catch rates as input data into operational management procedure (OMP). 14<sup>th</sup> Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (poster presentation)
- Tew-Kai E, Walker E, van der Lingen CD, Coetzee JC, Bez N, van der Westhuizen J, Gremillet D. 2011. Analysing fishing patterns of purse-seiners in the southern Benguela using Vessel Monitoring Systems (VMS). 14th Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (oral presentation)
- Tjizoo BM, **Yemane D**, Axelsen B, Nakwaya D. 2011. Horse mackerel and jellyfish species co-occurrence in the physical environmental of the northern Benguela. *NansClim Mid-term meeting*, 14–16 March 2011, Cape Town, South Africa. (oral presentation)
- Twatwa NM, Yemane D, van der Lingen CD. 2011. Updates of spawning habitat characterization of anchovy (*Engraulis encrasicolus*) and sardine (*Sardinops sagax*) in the southern Benguela using modified single parameter quotient analysis. 14<sup>th</sup> Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (poster presentation)
- van der Lingen CD, Miller TW. 2011. Calibrating ecosystem models of the southern Benguela with stable isotope data. 14<sup>th</sup> Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (oral presentation)
- van der Lingen CD. 2011. Climate change and fisheries in the southern Benguela. *Iziko Summer School 4: Climate Change Indaba, 11 February 2011, Cape Town, South Africa.* (oral presentation)
- Vaughan DB, **Christison KW**. 2011. Towards addressing the current state of confusion within the Hexabothriidae Price, 1942: *Callorhynchocotyle*, Suriano and Incorvaia, 1982 (Monogenea: Hexabothriidae) re-visited with the preliminary evaluation of novel parameters for measuring haptoral armature of hexabothriids. *Joint Symposium of the Zoological Society of southern Africa and the Parasitological Society of southern Africa*, 10–13 July 2011, Stellenbosch, South Africa. (oral presentation).
- Wessels G, Moloney CL, van der Lingen CD. 2011. Do sardine around southern Africa look alike? Meristic and morphometric variation amongst sardine (Sardinops sagax). 14<sup>th</sup> Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (poster presentation)
- Wilke CG, Kerwath SE, Götz A. 2011. The effect of barotrauma on five species of South African linefishes. 2011. 14<sup>th</sup> Southern African Marine Science Symposium, 4–7 April 2011, Grahamstown, South Africa. (poster presentation)
- Winker H, **Kerwath SE**, Götz A, Attwood CG, Booth AJ. 2011. Evaluation of delta-models for the standardisztion of CPUE time series: evidence for spill-over effect from a South African MPA? 14<sup>th</sup> Southern African Marine Science Symposium,

- 4–7 April 2011, Grahamstown, South Africa. (oral presentation)
- Yemane D, litembu J, Mafwila S, Axelsen BE, Kilongo K, Kainge P, Singh L, Johnsen E. 2011. Identification of common temporal trend in the demersal fish communities of the Benguela Current ecosystem (1985–2010). NansClim Midterm meeting, 14–16 March 2011, Cape Town, South Africa. (oral presentation)

## **Contributions to Workshops and Management and Scientific Bodies**

- **Githaiga-Mwicigi JM**. 2011. Squid permit conditions: proposed changes 2011/2012. *Annual Squid Permit Conditions Workshop.* 17 February 2011. Department of Agriculture Forestry and Fisheries, Cape Town, South Africa.
- Kerwath SE, Winker H, West W. 2011. 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. ICCAT Scientific Paper prepared for the South Atlantic Albacore Assessment Sessions, SCRS/2011/121, 25–29 July 2011, Madrid.
- Prochazka K, Githaiga-Mwicigi JM, Samodien F, Yemane D, Lamberth S. 2011. Readiness to respond to climate change: Group Three Inputs. Final Report. National Climate Change Conference for Agriculture, Forestry and Fisheries. 11–12 August 2011. CSIR, Pretoria.
- Samodien F, Githaiga-Mwicigi JM, Yemane D, Lamberth S, Prochazka K. 2011. DAFF related UNFCCC policy issues: Group One Inputs. Final Report. National Climate Change Conference for Agriculture, Forestry and Fisheries. 11–12 August 2011. CSIR, Pretoria.
- Sink KJ, Attwood CG, Lombard AT, Grantham H, Leslie R, Samaai T, Kerwath S, Majiedt P, Fairweather T, Hutchings L, van der Lingen C, Atkinson LJ, Wilkinson S, Hilness S, Wolf T. 2011. Spatial planning to identify focus areas for offshore biodiversity protection in South Africa. Final Report for the Offshore Marine Protected Area Project. Cape Town: South African National Biodiversity Institute.

### **Unpublished Working Group Documents**

- **Bali A, van der Lingen CD**. 2011. Is anchovy condition density dependent? *Fisheries/2011/SWG-PEL/08*.
- **Bali A**, **van der Lingen CD**. 2011. Update on anchovy catches. *Fisheries/2011/SWG-PEL/ICTT/10*.
- Butterworth DS, de Moor CL, Coetzee JC, Twatwa NM, Shabangu FW, van der Lingen C, Phillips M, van der Westhuizen JJ, Somhlaba S, de Goede J, Geja Y, Durholtz D. 2011. Further comments to MSC. *Fisheries/2011/SWG-PEL/49*.
- Butterworth DS, de Moor CL, Coetzee JC, Twatwa NM, Shabangu FW, van der Lingen C, Phillips M, van der Westhuizen JJ, Somhlaba S, de Goede J, Geja Y, Durholtz D. 2011. MSC comment on Smith et al. Fisheries/2011/SWG-PEL/48.
- Butterworth DS, de Moor CL, **Coetzee JC**. 2011. Collated comments from some members of the SWG-PEL in response to Fisheries/2011/SWG-PEL/30. *Fisheries/2011/SWG-PEL/36*.
- Butterworth DS, de Moor CL, Robinson W, **Coetzee JC**. 2011. Collated comments from some members of the small pelagic scientific working group in response to Fisheries/2011/SWG-PEL/29. *Fisheries/2011/SWG-PEL/34*.
- Butterworth DS, De Moor CL, van der Lingen CD, Coetzee JC.

- 2011. MSC Contributor Form PWG response to MSC documents published for public consultation MSC Comment Form 2011 consultation on Assessment of Low Trophic Level Fisheries (LTLF). *Fisheries/2011/SWG-PEL/37*.
- Coetzee J, van der Lingen C, Bali A. 2011. Catches of anchovy and sardine relative to their availability. MARAM IWS/DEC11/P/OMP/P10
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