

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

2018

This document lists the scientific output of the Fisheries Management Branch for 2018, arranged by output category. Figures in brackets represent the output for the previous two years, 2017 and 2016, respectively, and are included for comparison. In the category 'peer-reviewed publications' there were 30 (35, 39) papers, a decrease compared with the previous two years. There was a marked increase to 9 (3, 0) documents in the category 'theses/dissertations/tertiary projects', four of which were DAFF-authored (no less than three being PhDs) and all of which were DAFF-supervised or co-supervised. There were 11 (7, 2) documents in the category 'book chapters, published reports and popular articles', six of which were contributions to a volume entitled *Global ecology and oceanography of harmful algal blooms*, with a DAFF co-editor. There were 27 (80, 48) 'contributions to symposia and conferences, and public presentations', a substantial decrease compared with 2017. The large number in 2017 was explained by a total of 53 contributions to two local symposia with broad relevance to the research area of the Branch: Fisheries Management. In 2018, there was only one local conference with relatively broad relevance, the 31st *Congress of the Phycological Society of Southern Africa*, held from 14 to 17 July in Gauteng, to which there were six DAFF contributions. There were 53 (30, 26) 'contributions to workshops and management and scientific bodies, and unpublished technical reports', a major increase compared with recent years. Of these, 10 were contributions to meetings of regional fisheries management organisations, the *Indian Ocean Tuna Commission (IOTC)* (7) and the *International Commission for the Conservation of Atlantic Tunas (ICCAT)* (3). In addition, there were 10 contributions to estuary mouth management plans compiled by the Department of Environmental Affairs and Development Planning of the Western Cape Government, eight contributions to meetings of the *Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR)* and seven contributions to the *DAFF/MARAM International Fisheries Stock Assessment Review Workshop* held at the University of Cape Town from 26 to 30 November. Finally, there were 68 (51, 83) unpublished working group documents. This last category represents the output of the research component of the Branch in terms of its line function to provide scientific advice for resource management.

Peer-Reviewed Publications (names of DAFF staff shown in bold)

- Amoroso RO, Pitcher CR, Rijnsdorp AD, McConnaughey RA, Parma AM, Suuronen P, Eigaard OR, Bastardie F, Hintzen NT, Althaus F, Baird SJ, Black J, Buhl-Mortensen L, Campbell AB, Catarino R, Collie J, Cowan JH, **Durholtz D**, Engstrom N, **Fairweather TP**, Fock HO, Ford R, Gálvez PA, Gerritsen H, Góngora ME, González JA, Hiddink JG, Hughes KM, Intelmann SS, Jenkins C, Jonsson P, Kainge P, Kangas M, Kathena JN, Kavadas S, **Leslie RW**, Lewis SG, Lundy M, Makin D, Martin J, Mazor T, Gonzalez-Mirelis G, Newman SJ, Papadopoulou N, Posen PE, Rochester W, Russo T, Sala A, Semmens JM, Silva C, Tsolos A, Vanelslander B, Wakefield CB, Wood BA, Hilborn R, Kaiser MJ, Jennings S. 2018. Bottom trawl fishing footprints on the world's continental shelves. *Proceedings of the National Academy of Sciences* 115: E10275–E10282.
- Arendse DCZ**, **Pitcher GC**, Griffiths C. 2018. Reproductive condition and spawning induction in the South African scallop *Pecten sulcicostatus*. *Journal of Shellfish Research* 37: 1–7.
- Batista MB, Anderson AB, Sanches PF, Polito PS, Silveira TCL, Velez-Rubio GM, Scarabino F, Camacho O, Schmitz C, Martinez A, Ortega L, Fabiano G, **Rothman MD**, Liu G, Ojeda J, Mansilla A, Barreto LM, Assis J, Serrão EA, Santos R, Horta PA. 2018. Kelps' long-distance dispersal: role of ecological/oceanographic processes and implications to marine forest conservation. *Diversity* 10: 11.
- Breitburg D, Levin LA, Oschlies A, Grégoire M, Chavez FP, Conley DJ, Garçon V, Gilbert D, Gutiérrez D, Isensee K, Jacinto GS, Limburg KE, Montes I, Naqvi SWA, **Pitcher GC**, Rabalais NN, Roman MR, Rose KA, Seibel BA, Telszewski M, Yasuhara M, Zhang J. 2018. Declining oxygen in the global ocean and coastal waters. *Science* 359: eaam7240.
- Brink M, Dale Kuys R, Rhode C, **Macey BM**, **Christison KW**, Roodt-Wilding R. 2018. Genetic diversity and population connectivity of the sea urchin *Tripneustes gratilla* along the South African coast. *African Journal of Marine Science* 40: 149–156.

- Dicken ML, **Winker H**, Smale MJ, Cliff G. 2018. Sharks caught in the KwaZulu-Natal bather protection programme, South Africa. 14. The smooth hammerhead shark *Sphyrna zygaena* (Linnaeus). *African Journal of Marine Science* 40: 157–174.
- Farthing MW, Winkler AC, Anderson K, **Kerwath S**, **Wilke C**, Potts WM. 2018. The age and growth of hottentot seabream *Pachymetopon blochii* before and after the South African linefish state of emergency in 2000. *African Journal of Marine Science* 40: 187–196.
- Froese R, **Winker H**, Coro G, Demirel N, Tsikliras AC, Dimarchopoulou D, Scarcella G, Probst WN, Dureuil D, Pauly D. 2018. A new approach for estimating stock status from length frequency data. *ICES Journal of Marine Science* 75: 2004–2015.
- Froese R, **Winker H**, Coro G, Tsikliras A, Demirel N, Dimarchopoulou D, Scarcella G, Quaas M, Matz-Lück N. 2018. Status and rebuilding of European fisheries. *Marine Policy* 93: 159–170.
- Hampton SL, Moloney CL, **van der Lingen CD**, Labonne M. 2018. Spatial and temporal variability in otolith elemental signatures of juvenile sardine off South Africa. *Journal of Marine Systems* 188: 109–116.
- Kajee L, Griffiths CL, **Lamberth SJ**. 2018. Long-term physico-chemical and faunal changes in a small, rural South African estuary. *African Zoology* 53: 127–137.
- Kathena JN, **Yemane D**, Bahamon N, Jansen T. 2018. Population abundance and seasonal migration patterns indicated by commercial catch-per-unit-effort of hakes *Merluccius capensis* and *M. paradoxus* in the northern Benguela Current Large Marine Ecosystem. *African Journal of Marine Science* 40: 197–209.
- Kuguru G, Maduna S, **da Silva C**, Gennari E, Rhode C, Bester-van der Merwe A. 2018. DNA barcoding of chondrichthyans in South African fisheries. *Fisheries Research* 206: 292–295.
- Leliaert F, Payo DA, Gurgel CFD, Schils T, Draisma SGA, Saunders GW, Kamiya M, Sherwood AR, Lin S-M, Huisman JM, Le Gall L, **Anderson RJ**, Bolton JJ, Mattio L, Zubia M, Spokes T, Vieira C, Payri CE, Coppejans E, D'hondt S, Verbruggen H, De Clerck O. 2018. Patterns and drivers of species diversity in the Indo-Pacific red seaweed *Portieria*. *Journal of Biogeography* 45: 2299–2313.
- Mackintosh AL, Reed CC, Nunkoo MAI, King PH, **van der Lingen CD**. 2018. Macroparasites of angelfish *Brama brama* (Bonnaterre, 1788) in the southern Benguela Current ecosystem. *African Journal of Marine Science* 40: 245–252.
- Maduna SN, Rossouw C, Slabbert R, Wintner SP, **da Silva C**, Bester-van der Merwe AE. 2018. New polymorphic microsatellite loci revealed for the dusky shark *Carcharhinus obscurus* through Ion Proton double-digest RAD sequencing. *Molecular Biology Reports* 45: 2759–2763.
- Maduna SN, van Wyk JH, **da Silva C**, Gennari E, Bester-van der Merwe AE. 2018. Evidence for sperm storage in common smoothhound shark *Mustelus mustelus* and paternity assessment in a single litter from South Africa. *Journal of Fish Biology* 92: 1183–1191.
- Mbokane EM**, Moyo NAG. 2018. Alterations of haemato-biochemical parameters pre and post-challenge with *Aeromonas hydrophila* and survival of *Oreochromis mossambicus* fed *Moringa oleifera*-based diets. *Fish and Shellfish Immunology* 83: 213–222.
- Mbokane EM**, Theron J, Luus-Powell WJ. 2019. Seasonal occurrence and ecological aspects of *Afrodiplozoon polycotyleus* (Monogenea: Diplozoidae) from the gills of three cyprinids from the Nwanedi-Luphephe dams, South Africa. *African Journal of Aquatic Science* 44: 53–60.
- McKeown DA, Schroeder JL, Stevens K, Peters AF, Sáez CA, Park J, **Rothman MD**, Bolton JJ, Brown MT, Schroeder DC. 2018. Phaeoviral infections are present in *Macrocystis*, *Ecklonia* and *Undaria* (Laminariales) and are influenced by wave exposure in Ectocarpales. *Viruses* 10: 410.
- Mertens KN, Carbonell-Moore C, Pospelova V, Head MJ, Highfield A, Schroeder D, Gu H, Andre K, Fernandez M, Yamaguchi A, Takano Y, Matsuoka K, Nézan E, Bilien G, Okolodkov Y, Koike K, Hoppenrath M, Pfaff M, **Pitcher GC**, Al-Muftah A, Rochon A, Lim PT, Liow GR, Lim ZF, Ellegaard M. 2018. The potentially toxic *Pentaplastodinium saltonense* gen. et sp. nov. (Dinophyceae), and its relationship to the cyst-defined *Operculodinium psilatium* and *Protoceratium reticulatum*. *Harmful Algae* 71: 57–77.
- Ortega-Cisneros K, Yokwana S, Sauer W, Cochrane K, **Cockcroft A**, James NC, Potts WM, **Singh L**, Smale M, Wood A, Pecl G. 2018. Assessment of the likely sensitivity to climate change for the key marine species in the southern Benguela system *African Journal of Marine Science* 40: 279–292.
- Pazmiño DA, Maes GE, Green ME, Simpfendorfer CA, Hoyos-Padilla EM, Duffy CJ, Meyer CG, **Kerwath SE**, Salinas-de-León P, van Herwerden L. 2018. Strong trans-Pacific break and local conservation units in the Galapagos shark (*Carcharhinus galapagensis*) revealed by genome-wide cytonuclear markers. *Heredity* 120: 407–421.
- Pitcher GC**, **Foord CJ**, **Macey BM**, **Mansfield L**, Mouton A, Smith ME, Osmond SJ, van der Molen L. 2019. Devastating farmed abalone mortalities attributed to yesso-toxin-producing dinoflagellates. *Harmful Algae* 81: 30–41.
- Reddy M, De Clerck O, Leliaert F, **Anderson RJ**, Bolton JJ. 2018. A rosette by any other name: species diversity in the Bangiales (Rhodophyta) along the South African coast. *European Journal of Phycology* 53: 67–82.
- Sherley RB, Barham BJ, Barham PJ, Campbell KJ, Crawford RJM, Grigg J, Horswill C, McInnes A, Morris TL, Pichegru L, Steinfurth A, Weller F, **Winker H**, Votier SC. 2018. Bayesian inference reveals positive but subtle effects of experimental fishery closures on marine predator demographics. *Proceedings of the Royal Society B* 285: 20172443.
- Teske PR, Golla TR, Sandoval-Castillo J, Emani-Khoyi A, **van der Lingen CD**, von der Heyden S, Chiazzari B, Jansen van Vuuren B, Beheregaray L. 2018. Mitochondrial DNA is unsuitable to test for isolation by distance. *Scientific Reports* 8: 8448.
- van der Sleen P, Rykaczewski RR, Turley BD, Sydeman WJ, Garcia-Reyes M, Bograd SJ, **van der Lingen CD**, **Coetzee JC**, Lamont T, Black BA. 2018. Non-stationary responses in anchovy (*Engraulis encrasicolus*) recruitment to coastal upwelling in the Southern Benguela. *Marine Ecology Progress Series* 596: 155–164.
- Wessels W, **Auerswald L**, Pakhomov E, Pakhomova L, Meyer B, Michael K. 2018. The performance of krill vs. salps to withstand in a warming Southern Ocean (PEKRIS). *Reports on Polar and Marine Research* 722: 40–46.
- Winker H**, Carvalho F, Kapur M. 2018. JABBA: Just Another Bayesian Biomass Assessment. *Fisheries Research* 204: 277–288.

Theses/Dissertations/Tertiary Projects

- Button R. 2018. Remotely operated vehicle exploring ichthyofauna association with habitat from shore-shelf, in an endemism hotspot in South Africa. MSc thesis, University of Cape Town. Supervisors: **Kerwath SE, Parker D.**
- da Silva C.** 2018. Biology, movement behaviour and spatial dynamics of an exploited population of smoothhound shark *Mustelus mustelus* around a coastal marine protected area in South Africa. PhD thesis, University of Cape Town. Supervisors: **Kerwath SE, Attwood C.**
- Haupt M. 2018. Life history traits that predispose South African linefishes to overexploitation. MSc thesis, University of Cape Town. Supervisors: **Kerwath SE, Parker D, Winker H.**
- Horton M. 2018. Age, growth and per-recruit assessment of the Saldanha and Langebaan stock of *Chelon richardsonii*. MSc thesis, University of Cape Town. Supervisors: **Kerwath SE, Parker D.**
- Madibana MJ.** 2018. Effect of dietary additives on growth performance, gut histology, blood parameters, and tissue nutrient composition of South African dusky kob, *Argyrosomus japonicus*. PhD thesis, North-West University. Supervisors: Mlambo V, **Fouche CH.**
- Mbanjwa HT.** 2018. Reproductive biology of artificially seeded abalone, *Haliotis midae* along the coast of South Africa. BTech, Cape Peninsula University of Technology, Cape Town. Supervisors: **Arendse DCZ, Sparks C.**
- McGrath A. 2018. Modelling the effects of spatio-temporal spawning variability on the transport and retention success of sardine (*Sardinops sagax*) eggs and larvae around South Africa. MSc thesis, University of Cape Town. Supervisors: Moloney C, Roy C, Hermes J, **van der Lingen CD.**
- Shabangu FW.** 2018. Acoustic assessment of the seasonal occurrence and behaviour of Antarctic blue whales *Balaenoptera musculus intermedia* in the southeastern Atlantic and Southern Oceans. PhD thesis, University of Pretoria. Supervisor: Findlay KP.
- Weston MJ. 2018. Investigating trophic interactions between parasites and their marine fish hosts using stable isotope analysis. MSc thesis, University of Cape Town. Supervisors: Reed CC, **van der Lingen CD.**

Book Chapters, Published Reports and Popular Articles

- Augustyn J, **Cockcroft AC, Kerwath S, Lamberth S, Githaiga-Mwicigi J, Pitcher G**, Roberts M, **van der Lingen C, Auerswald L.** 2018. South Africa. In: Phillips B, Perez-Ramirez M (eds), *Climate change impacts on fisheries and aquaculture: a global analysis*. Hoboken, USA: Wiley & Sons Ltd. pp 479–522.
- Augustyn CJ, **Cockcroft A, Coetzee J, Durholtz D, van der Lingen CD.** 2018. Rebuilding South African fisheries: three case studies. In: Garcia SM, Ye Y (eds), *Rebuilding of marine fisheries. Part 2. Case studies. FAO Fisheries and Aquaculture Technical Paper No. 630/2*. Rome: FAO (Food and Agriculture Organization of the United Nations). pp 107–143.
- Breitbart D, Grégoire M, Isensee K, Chavez F, Conley D, Garçon V, Gilbert D, Gutierrez D, Jacinto G, Levin L, Limburg K, Montes I, Naqvi W, Oschlies A, **Pitcher G**, Rabalais N, Roman M, Rose K, Seibel B, Telszewski M, Yasuhara M, Zhang J. 2018. The ocean is losing its breath. Paris, France: IOC-UNESCO (Intergovernmental

Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization).

- Glibert PM, Berdalet E, Burford MA, **Pitcher GC**, Zhou M (eds). 2018. *Global ecology and oceanography of harmful algal blooms. Ecological Studies 232*. Gewerbestrasse, Switzerland: Springer International Publishing.
- Glibert PM, Berdalet E, Burford MA, **Pitcher GC**, Zhou M. 2018. Introduction to the global ecology and oceanography of harmful algal blooms (GEOHAB) synthesis. In: Glibert PM, Berdalet E, Burford MA, Pitcher GC, Zhou M (eds), *Global ecology and oceanography of harmful algal blooms. Ecological Studies 232*. Gewerbestrasse, Switzerland: Springer International Publishing. pp 3–7.
- Glibert PM, Berdalet E, Burford MA, **Pitcher GC**, Zhou M. 2018. Harmful algal blooms and the importance of understanding their ecology and oceanography. In: Glibert PM, Berdalet E, Burford MA, Pitcher GC, Zhou M (eds), *Global ecology and oceanography of harmful algal blooms. Ecological Studies 232*. Gewerbestrasse, Switzerland: Springer International Publishing. pp 9–25.
- Glibert PM, **Pitcher GC**, Bernard S, Li M. 2018. Advancements and continuing challenges of emerging technologies and tools for detecting harmful algal blooms, their antecedent conditions and toxins, and applications in predictive models. In: Glibert PM, Berdalet E, Burford MA, Pitcher GC, Zhou M (eds), *Global ecology and oceanography of harmful algal blooms. Ecological Studies 232*. Gewerbestrasse, Switzerland: Springer International Publishing. pp 339–357.
- Kudela RM, Raine R, **Pitcher GC**, Gentien P, Berdalet E, Enevoldsen H, Urban E. 2018. Establishment, goals, and legacy of the global ecology and oceanography of harmful algal blooms (GEOHAB) programme. In: Glibert PM, Berdalet E, Burford MA, Pitcher GC, Zhou M (eds), *Global ecology and oceanography of harmful algal blooms. Ecological Studies 232*. Gewerbestrasse, Switzerland: Springer International Publishing. pp 27–49.
- Madibana MJ.** 2018. Wild vs farmed dusky kob tongue taste. *Fishing Industry News Southern Africa* August. pp 14–15.
- Pitcher GC**, Figueiras FG, Kudela RM, Moita T, Reguera B, Ruiz-Villareal M. 2018. Key questions and recent research advances on harmful algal blooms in eastern boundary upwelling systems. In: Glibert PM, Berdalet E, Burford MA, Pitcher GC, Zhou M (eds), *Global ecology and oceanography of harmful algal blooms. Ecological Studies 232*. Gewerbestrasse, Switzerland: Springer International Publishing. pp 205–227.
- van der Lingen CD**, Hampton I. 2018. Climate change impacts, vulnerabilities and adaptations: southeast Atlantic and southwest Indian Ocean marine fisheries. In: Barange M, Bahri T, Beveridge MCM, Cochrane KL, Funge-Smith S, Poulain F (eds), *Impacts of climate change on fisheries and aquaculture: synthesis of current knowledge, adaptation and mitigation options. FAO Fisheries and Aquaculture Technical Paper No. 627*. Rome: FAO (Food and Agriculture Organization of the United Nations). pp 219–250.

Contributions to Symposia and Conferences, and Public Presentations

- Bjordal A, **Coetzee JC.** 2018. Acoustic estimation of dominant mesopelagic fish biomass in the southern Benguela. *South Africa/Norway Cooperation on Oceans Research*

- (SANOCCEAN) 2018 conference. 1 November 2018, Cape Town, South Africa. (oral presentation)
- Button R, **Parker D**, **Kerwath SE**. 2018. Using a remote operated vehicle to explore offshore ichthyofaunal composition and habitat. *Student Conference on Conservation Science, 27–29 March 2018, University of Cambridge, Cambridge, UK*. (oral presentation)
- Coetzee V, **Kerwath S**, **Parker D**, **Shabangu F**, **Lamberth S**. 2018. Something sounds fishy...proof of concept: using fish acoustic repertoire as a means of stock delineation in spotted grunter. *African Bioacoustics Community Conference, 3–7 December 2018, Cape Town, South Africa*. (oral presentation)
- Ekau W, **van der Lingen CD**. 2018. Trophic transfer efficiency in the Benguela Current (TRAFFIC). *Science Partnerships for the Adaptation to Complex Earth System Processes (SPACES 2) Kick-Off Meeting & 4th National Global Change Conference, 5–7 December, Polokwane, South Africa*. (oral presentation)
- Fleischman MJ, Bolton JJ, **Rothman MD**. 2018. Using *Macrocystis pyrifera* (Laminariales) as an alternative abalone feed, within the South African abalone industry. *31st Congress of the Phycological Society of Southern Africa, 14–17 July 2018, Gauteng, South Africa*. (oral presentation)
- Garçon V, Karstensen J, Palacz A, Telszewski M, Cheikh Mbaye B, Chavez F, Coelho P, Gutierrez D, Jacinto G, Koslow T, Levin L, Montes I, Naqvi W, **Pitcher G**, Rose K, Shenoy D, Weng K. 2018. Demonstrating the value of enhanced multidisciplinary sustained observations for understanding variability in the oxycline and its impacts on the EBUS ecosystems. *Ocean Deoxygenation: Drivers and Consequences, Past, Present, Future, 3–7 September 2018, Kiel, Germany*. (oral presentation)
- Grégoire M, Breitburg D, Levin LA, Oschlies A, Chavez FP, Conley DJ, Garçon V, Gilbert D, Gutiérrez D, Isensee K, Jacinto GS, Limburg KE, Montes I, Naqvi SWA, **Pitcher GC**, Rabalais NN, Roman MR, Rose KA, Seibel BA, Telszewski M, Yasuhara M, Zhang J. 2018. Declining oxygen in the global ocean and coastal waters. *The 50th Liège Colloquium on Ocean Dynamics, 28 May–1 June 2018, Liège, Belgium*. (oral presentation)
- Hoareau TB, Bloomer P, Fennessy S, Gouws G, Klopper A, Mann B, **Parker D**. 2018. Progress on DNA barcoding of South Africa's linefish species. *The Conservation Symposium, 5–8 November 2018, Durban, South Africa*. (oral presentation)
- Madibana MJ**, Mlambo V, **Lewis BR**, Lisa Y. 2018. First report on the effect of dietary seaweed, *Ulva* sp., on fatty acids concentration in South African juvenile dusky kob (*Argyrosomus japonicus*, Sciaenidae). *BIT's 7th Annual World Congress of Aquaculture and Fisheries, 29 October–01 November 2018, Weihai, People's Republic of China*. (oral presentation)
- Malige F, Patris J, Buchan SJ, Stafford KM, **Shabangu FW**, Findlay KP, Hucke-Gaete R, Neira S, Clark CW, Glotin H. 2018. Joint analysis of pulsation and peak frequency: a model for examining frequency decrease in pulsed blue whale song of the South East Pacific. *18th SOLAMAC Conference, La Sociedad Latinoamericana de Especialistas en Mamíferos Acuáticos (SOLAMAC), 5–8 November 2018, Lima, Peru*. (oral presentation)
- Mansfield L**, **Pitcher GC**. 2018. South Africa's participation in HAEDAT and OBIS. *31st Congress of the Phycological Society of Southern Africa, 14–17 July 2018, Gauteng, South Africa*. (oral presentation)
- Matshamba L, **Rothman MD**, Bolton JJ, Dlaza TS. 2018. Habitat and site effects on the morphology of *Ecklonia radiata* along the Eastern Cape coastline. *31st Congress of the Phycological Society of Southern Africa, 14–17 July 2018, Gauteng, South Africa*. (oral presentation)
- Ndhlovu A, Dhar N, Garg N, Xuma T, **Pitcher GC**, Sym SD, Durand PM. 2018. The thecal structure of the red tide forming dinoflagellate *Prorocentrum triestinum*. *31st Congress of the Phycological Society of Southern Africa, 14–17 July 2018, Gauteng, South Africa*. (oral presentation)
- Nunkoo I, Reed C, **Kerwath S**, **van der Lingen CD**, Ndjaula H. 2018. Parasites as indicators of snoek population structure in Southern Africa. *ICOPA 2018, 14th International Congress of Parasitology, 19–24 August, Daegu, Korea*. (poster presentation)
- Pitcher GC**, **Probyn TA**, **du Randt A**, **Mansfield LM**. 2018. Drivers of anoxia in a large embayment of an eastern boundary upwelling system – St Helena Bay. *Ocean Deoxygenation: Drivers and Consequences, Past, Present, Future, 3–7 September 2018, Kiel, Germany*. (oral presentation)
- Pitcher GC**, **Foord CJ**, **Macey BM**, **Mansfield L**, Mouton A, Smith M, Osmond SJ, van der Molen L. 2018. Devastating farmed abalone mortalities attributed to yessotoxin-producing dinoflagellates. *31st Congress of the Phycological Society of Southern Africa, 14–17 July 2018, Gauteng, South Africa*. (oral presentation)
- Pitcher GC**, **Foord CJ**, **Macey BM**, **Mansfield L**, Mouton A, Smith M, Osmond SJ, van der Molen L. 2018. Abalone farms suffer devastating mortalities attributed to yessotoxin-producing dinoflagellates. *International Conference on Harmful Algae (ICHA), 21–26 October 2018, Nantes, France*. (oral presentation)
- Purdon J, Pienaar M, Somers MJ, Findlay KP, **Shabangu FW**. 2018. Seismic surveys in South Africa: are the current mitigation measures adequate to protect marine fauna? *1st African Bioacoustics Community Conference, 2–7 December 2018, Cape Town, South Africa*. (oral presentation)
- Reed C, Le Roux J, Bowker J, Nunkoo I, Morris T, Weston L, Ssempe N, Mackenzie K, **van der Lingen CD**. 2018. Parasites as biotags in Southern African applied marine research. *ICOPA 2018, 14th International Congress of Parasitology, 19–24 August, Daegu, Korea*. (oral presentation)
- Shabangu FW**. 2018. Description of seasonal acoustic occurrences of humpback and minke whales in South Africa and Antarctica. *176th Meeting of the Acoustical Society of America and 2018 Acoustics Week in Canada, 5–9 November 2018, Victoria, Canada*. (oral presentation)
- Shabangu FW**. 2018. Factors influencing acoustic attenuation at 38 kHz by air bubbles: a modelling approach. *176th Meeting of the Acoustical Society of America and 2018 Acoustics Week in Canada, 5–9 November 2018, Victoria, Canada*. (oral presentation)
- Shabangu FW**, Findlay K. 2018. Singing vs quacking: seasonal acoustic occurrences and vocalizing patterns of humpback and minke whales in South Africa and Antarctica. *African Marine Mammal Colloquium, 22–23 August 2018, Port Elizabeth, South Africa*. (oral presentation)
- Shabangu FW**, Findlay K. 2018. Songs of humpback whales (*Megaptera novaeangliae*) off Antarctica and South Africa. *South African National Antarctic Programme, 5th Symposium, 13–16 August 2018, Hermanus, South Africa*. (oral presentation)

- Rothman MD**, Bolton JJ, Stekoll MS, **Boothroyd CJT**, **Kemp FA**, **Anderson, RJ**. 2018. Geographical variation of the two dominant kelp species, *Ecklonia maxima* and *Laminaria* (Phaeophyceae, Laminariales), on the west coast of Southern Africa. *31st Congress of the Phyco-logical Society of Southern Africa*, 14–17 July 2018, Gauteng, South Africa. (oral presentation)
- van der Lingen CD**, **Lamberth SJ**, **Githaiga-Mwicigi J**. 2018. Is climate change impacting South Africa's marine fisheries? *Ocean Science Days in the Cape*, 23–26 October, Cape Town, South Africa. (oral presentation)
- Van Niekerk L, **Lamberth SJ**, James N, Taljaard S, Theron A, Krug M, Meyer A. 2018. A review and synthesis of the vulnerability of South African estuaries to climate change. *Estuarine & Coastal Science Association. ECSA 57: changing estuaries, coasts and shelf systems – diverse threats and opportunities*, 3–6 September 2018, Perth Australia. (poster presentation)
- Wessels W, **Auerswald L**, Michael K, Meyer B. 2018. Estimating adaptive capacities of *Salpa thompsoni* facing Southern Ocean warming. *Polar2018*, 15–26 June 2018, Davos, Switzerland. (poster presentation)

Contributions to Workshops and Management and Scientific Bodies; Unpublished Technical Reports

- Abraham E, Carneiro A, Fahmi Z, Inoue Y, Kathena J, Kim D, Lee S, Maree B, Oshima K, Parsa M, Rice J, Sant'Ana R, Sharma R, Small C, Tsuji S, Wanless R, **Winker H**, Wolfaardt A. 2018. Update on the Seabird Component of the Common Oceans (ABNJ) Tuna Project – Seabird Bycatch Assessment Workshop. *Indian Ocean Tuna Commission, 14th Working Party on Ecosystems and Bycatch*, 10–14 September 2018, Cape Town, South Africa. IOTC-2018-WPEB14-25.
- Akuda T, **Somhlaba S**, Ichii T, Namba T, Sarralde R. 2018. Spatial pattern of major by-catch fishes at Subarea 48.6 during 2012/13–2016/17. *CCAMLR Fishery Stock Assessment Meeting*, 8–19 October 2018, Hobart, Australia. CCAMLR WG-FSA-18/70.
- Backeberg B, **Githaiga-Mwicigi J**, Joubert W, **Kerwath SE**, Krug M, **Lamberth SJ**, Rautenbach C, Taljaard S, Theron A, **van der Lingen C**, Van Niekerk L. 2018. Marine environment. *South Africa's Third National Communication under the United Nations Framework Convention on Climate Change*. Pretoria, South Africa: Department of Environment Affairs.
- Coetzee JC**, **de Moor CL**, **Butterworth DS**. 2018. A summary of the sardine (and anchovy) fishery. *DAFF/MARAM International Fisheries Stock Assessment Review Workshop*, 26–30 November 2018, Cape Town, South Africa. MARAM/IWS/2018/Sardine/BG1.
- Coetzee J**, de Moor C, **van der Lingen C**. 2018. A summary of the South African sardine resource and fishery. *Oral presentation to the DAFF/MARAM International Fisheries Stock Assessment Review Workshop*, 26–30 November 2018, Cape Town, South Africa.
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