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

2017

This document lists the scientific output of the Fisheries Management Branch for 2017, arranged by output category. Figures in brackets represent the output for 2016, and are included for comparison. In the category 'peer-reviewed publications' there were 35 (39) papers, a slight decrease compared with the previous year. There were 3 (0) documents in the category 'theses/dissertations/tertiary projects', only one of which was DAFF-authored but all of which were DAFF-supervised. There were 7 (2) documents in the category 'book chapters, published reports and popular articles', three of which were reports published in the ICCAT series *Collective Volume of Scientific Papers*. There were 80 (48) 'contributions to symposia and conferences, and public presentations', a substantial increase compared with 2016. This increase is explained largely by contributions to two local symposia, the 16th Southern African Marine Science Symposium (SAMSS), held from 4–7 July 2017 in Port Elizabeth (31 presentations), and the Annual International Conference and Exposition of the World Aquaculture Society, held from 26–30 June 2017 in Cape Town (22 presentations). There were 30 (26) 'contributions to workshops and management and scientific bodies, and unpublished technical reports'. Finally, there were 51 (83) unpublished working group documents.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)

- Bester-van der Merwe AE, Bitalo D, Cuevas JM, Ovenden J, Hernández S, **da Silva C**, McCord M, Roodt-Wilding R. 2017. Population genetics of Southern Hemisphere tope shark (*Galeorhinus galeus*): intercontinental divergence and constrained gene flow at different geographical scales. *PloS ONE* 12: e0184481.
- Bosch AC, O'Neill B, **Kerwath SE**, Sigge GO, Hoffman LC. 2017. Metal concentrations and toxicity in South African snoek (*Thyrsites atun*) and yellowtail (*Seriola lalandi*). *Marine Pollution Bulletin* 122: 360–365.
- Connan M, Bonnevie BT, Hagen C, van der Lingen CD, McQuaid C. 2017. Diet specialization in a colonial seabird studies using three complementary dietary techniques: effects of intrinsic and extrinsic factors. *Marine Biology* 164: 171.
- de Moor CL, Butterworth DS, van der Lingen CD. 2017. The quantitative use of parasite data in multi-stock modelling of South African sardine (*Sardinops sagax*). Canadian Journal of Fisheries and Aquatic Sciences 74: 1895–1903.
- Francis C, Bolton JJ, Mattio L, Mandiwana-Neudani T, **Anderson RJ**. 2017. Molecular systematics reveals increased diversity within the South African *Laurencia* complex (Rhodomelaceae, Rhodophyta). *Journal of Phycology* 53: 804–819.
- Froese RN Demirel, Coro G, Kleisner KM, **Winker H**. 2017. Estimating fisheries reference points from catch and resilience. *Fish and Fisheries* 18: 506–526.
- Helm CW, Anderson RJ, Buckley LG, Cawthra HC, De Vynck JC. 2017. Biofilm assists recognition of avian trackways in Late Pleistocene coastal aeolianites, South Africa. *Palaeontologica Africana* 52: 78–84.
- Henriques R, Nielsen ES, Durholtz D[M], Japp D, von der

- Heyden S. 2017. Genetic population sub-structuring of kingklip (*Genypterus capensis* Ophidiidiae), a commercially exploited demersal fish off South Africa. *Fisheries Research* 187: 86–95.
- Huchzermeyer CF, Huchzermeyer KDA, Christison KW, Macey BM, Colly PA, Mudenda Hang'ombe B, Songe M. 2017. First report of serious outbreak of epizootic ulcerative syndrome in the upper Congo River catchment in the North West of Zambia. *Journal of Fish Diseases* 41: 87–94.
- Jansen T, Kristensen K, Fairweather TP, Kainge P, Kathena JN, Durholtz [M]D, Beyer JE, Thygesen UH. 2017. Geostatistical modelling of the spatial life history of post-larval deep-water hake Merluccius paradoxus in the Benguela Current Large Marine Ecosystem. African Journal of Marine Science 39: 349–361.
- Kogame K, Uwai S, **Anderson RJ**, Choi H-G, Bolton JJ. 2017. DNA barcoding of South African geniculate coralline algae. *South African Journal of Botany* 108: 337–341.
- Kudela RM, Berdalet E, Enevoldsen H, **Pitcher G**, Raine R, Urban E. 2017. GEOHAB–The Global Ecology and Oceanography of Harmful Algal Blooms Program: motivation, goals, and legacy. *Oceanography* 30: 12–21.
- Lamont T, Garcia-Reyes M, Bograd SJ, van der Lingen CD, Sydeman WJ. 2017. Upwelling indices for comparative ecosystem studies: variability in the Benguela Upwelling Ecosystem. *Journal of Marine Systems*. https://doi.org/10.1016/j.jmarsys.2017.05.007
- Madibana MJ, Mbokane LM, Fouché CH. 2017. The effect of commercial feed supplemented with selected yeast, probiotics and herbal additives on the growth performance of juvenile dusky kob (*Argyrosomus japonicus*). *Croatian Journal of Fisheries* 75: 160–166.

- Madibana MJ, Mlambo V, Lewis BR, Fouché CH. 2017. Effect of graded levels of dietary *Ulva* sp. on growth, hematological and serum biochemical parameters in dusky kob, *Argyrosomus japonicus*. *Egyptian Journal of Aquatic Research* 43: 249–254.
- Maduna SN, Rossouw C, **Da Silva C**, Soekoe M, Bester-van der Merwe AE. 2017. Species identification and comparative population genetics of four coastal hound-sharks based on novel NGS-mined microsatellites. *Ecology and Evolution* 7: 1462–1486.
- Mdlalose TI, Christison KW, Vosloo A. 2017. Use of dried blood spots (DBS) to diagnose hyper- and hypoglycaemia in farmed kob Argyrosomus japonicus. Aquaculture 473: 43–50.
- Meyer B, Freier U, Grimm V, Groeneveld J, Hunt BPV, **Kerwath S[E]**, King R, Klaas C, Pakhomov E, Meiners KM. 2017. The winter pack-ice zone provides a sheltered but foodpoor habitat for larval Antarctic krill. *Nature Ecology & Evolution* 1: 1853–1861.
- Ndhlovu A, Dhar N, Garg N, Xuma T, Pitcher GC, Sym SD, Durand PM. 2017. A red tide forming dinoflagellate Prorocentrum triestinum: identification, phylogeny and impacts on St Helena Bay, South Africa. Phycologia 56: 649–665.
- Nunkoo I, Weston MJ, Reed CC, van der Lingen CD, Kerwath S[E]. 2017. First account of the metazoan parasite fauna of oilfish *Ruvettus pretiosus* Cocco, 1892 (Perciformes: Gempylidae) in South African waters. *Afri*can Zoology 52: 237–241.
- O'Neill B, Bosch AC, **Kerwath SE**, Sigge GO, Hoffman LC. 2017. Presence, concentration and trends of metals: a baseline study of blacktail (*Diplodus sargus capensis*) and hottentot (*Pachymetopon blochii*) along the South African coastline. *Marine Pollution Bulletin* 121: 352–356.
- Parker D, Kerwath SE, Næsje TF, Arendsen CJ, Keulder-Stenevik FJ, Hutchings K, Clark BM, Winker H, Cowley PD, Attwood CG. 2017. When plenty is not enough: an assessment of the white stumpnose *Rhabdosargus globiceps* fishery of Saldanha Bay, South Africa. *African Journal of Marine Science* 39: 153–166.
- **Pitcher GC**, Jiménez AB, Kudela RM, Reguera B. 2017. Harmful algal blooms in eastern boundary upwelling systems: a GEOHAB Core Research Project. *Oceanography* 30: 22–35.
- **Pitcher GC**, **Probyn TA**. 2017. Seasonal and sub-seasonal oxygen and nutrient fluctuations in an embayment of an eastern boundary upwelling system: St Helena Bay. *African Journal of Marine Science* 39: 95–110.
- Reed JR, **Kerwath SE**, Attwood CG. 2017. Bycatch in the South African midwater-trawl fishery for horse mackerel *Trachurus capensis* as established from observer records. *African Journal of Marine Science* 39: 279–291.
- Roberson LA, Attwood CG, **Winker H**, **Cockcroft AC**, **van Zyl DL**. 2017. Potential application of the baited remote underwater video system (BRUVs) to survey abundance of west coast rock lobster *Jasus lalandii*. *Fisheries Management Ecology* 24: 49–61.
- Rothman MD, Bolton JJ, Stekoll MS; Boothroyd CJT, Kemp FA, Anderson RJ. 2017. Geographical variation in morphology of the two dominant kelp species, *Ecklonia maxima* and *Laminaria pallida* (Phaeophyceae, Laminariales), on the west coast of Southern Africa. *Journal of Applied Phycology* 29: 2627–2639.
- **Rothman MD**, Mattio L, Anderson RJ, Bolton JJ. 2017. A phylogeographic investigation of the kelp genus *Laminaria* (Laminariales, Phaeophyceae), with emphasis on the South Atlantic Ocean. *Journal of Phycology* 53: 778–789.

- **Shabangu FW**, **Yemane D**, Stafford KM, Ensor P, Findlay KP. 2017. Modelling the effects of environmental conditions on the acoustic occurrence and behavior of Antarctic blue whales. *PLoS ONE* 12: e0172705.
- Sherley RB, Botha P, Underhill LG, Ryan PG, van Zyl D[L], Cockcroft AC, Crawford RJM, Dyer BM, Cook TR. 2017. Defining ecologically relevant scales for spatial protection with long-term data on an endangered seabird and local prey availability. *Biological Conservation* 0: 1–10.
- Smit AJ, Bolton JJ, Anderson RJ. 2017. Seaweeds in two oceans: beta diversity. Frontiers in Marine Science 4: 404. doi: 10.3389 fmars.2017.00404.
- Vaughan DB, Christison KW. 2017. Anoplodiscus Sonsino, 1890: a new Australian species, and the first African record from South African hosts. Systematic Parasitology 94: 891–906.
- Veríssimo A, Sampaio Í, McDowell JR, Alexandrino P, Mucientes G, Queiroz N, **da Silva C**, Jones CS, Noble LR. 2017. World without borders genetic population structure of a highly migratory marine predator, the blue shark (*Prionace glauca*). *Ecology and Evolution* 7: 4768–4781.
- Veríssimo A, Zaera-Perez D, **Leslie RW**, Iglésias SP, Séret B, Grigoriou P, Serioti A, Gubili C, Navarro J, Duffy C, Hernández S, Batjakas IE, Griffiths AM. 2017. Molecular diversity and distribution of eastern Atlantic and Mediterranean dogfishes *Squalus* highlight taxonomic issues in the genus. *Zoologica Scripta* 46: 414–428.
- Wintner SP, **Kerwath SE**. 2017. Cold fins, murky waters and the moon: what affects shark catches in the bather-protection program of KwaZulu–Natal, South Africa? *Marine and Freshwater Research* 69: 167–177.

Theses/Dissertations/Tertiary Projects

- Boyd DW. 2017. Age-structured stock assessment of Geelbek Atractoscion aequidens, a commercially important South African boat-based hand-line fishery species. MSc thesis, University of Cape Town. Supervisors: Winker H, Kerwath SE, Altwegg R
- Coetzee V. 2017. First Remotely Operated Vehicle survey of deep ichthyofaunal communities in the Amathole region of South Africa. BSc (Hons) thesis. University of Cape Town, South Africa. Supervisors: **Kerwath S[E], Parker D**
- Ntiyantiya D. 2017. Factors influencing infection indices of west coast redeye *Etrumeus whiteheadi* by a digenean "tetracotyle" type metacercarian parasite in South Africa. BTech, Cape University of Technology, Cape Town, South Africa. Supervisors: Shabangu FW, van der Lingen C[D]

Book Chapters, Published Reports and Popular Articles

- Augustyn J[A], Cockcroft A[C], Kerwath S[E], Lamberth S[J], Githaiga-Mwicigi J, Pitcher G[C], Roberts M, van der Lingen C[D], Auerswald L. 2017. Climate change impacts on fisheries and aquaculture: a global analysis. In: Phillips BF, Pérez-Ramírez M (eds), The impacts of climate change on fisheries and aquaculture: a global analysis. Hoboken, USA: John Wiley and Sons Ltd. pp 479–522.
- Froese R, **Winker H**, Gascuel D, Pauly D. 2017. How can we reduce the impact of fishing? *Science Journal for Kids*. pp 1–4.

- **Parker D**, **Kerwath S[E]**, Sink K. 2017. Dredging the depths of the Amathole to find sponges, corals and shipwrecks. *Maritime Review Africa* Nov/Dec: 6–7.
- Parker D, Winker H, West W, Kerwath SE. 2017. Standardization of the catch per unit effort for swordfish (Xiphias gladius) for the South African longline fishery. Collective Volume of Scientific Papers. International Commission for the Conservation of Atlantic Tunas (ICCAT) 74: 1295–1305.
- **Shabangu FW**. 2017. Trip to Monterey Bay, California: lessons and sentiments. *South African Network for Coastal and Oceanic Research Newsletter* 214: 21–24.
- Winker H, Carvalho F, Sharma R, Parker D, Kerwath SE. 2017. Initial stock assessment results for the North and South Atlantic shortfin mako (*Isurus oxyrinchus*) using a Bayesian surplus production model and the catchresilience method CMSY. *Collective Volume of Scientific Papers. International Commission for the Conservation of Atlantic Tunas (ICCAT)* 74: 1836–1866.
- Winker H, Kerwath SE, West W. 2017. Standardization of the catch per unit effort for albacore (*Thunnus ala-lunga*) for the South African tuna-pole-line (baitboat) fleet for the time series 2003–2015 Collective Volume of Scientific Papers. International Commission for the Conservation of Atlantic Tunas (ICCAT) 74: 716–728.

Contributions to Symposia and Conferences, and Public Presentations

- **Arendse DCZ**, **Pitcher GC**, **Lewis BR**. 2017. Effect of temperature and stocking density on larval growth and survival of the scallop *Pecten sulcicostatus*. 21st *International Pectinid Workshop*, 19–25 *April 2017*, *Portland Maine*, *USA*. (oral presentation)
- Arendse DCZ, Pitcher GC, Lewis BR, Sassman LC, Mbanjwa HT. 2017. The growth and survival of cultured larvae of Pecten sulcicostatus. The Annual International Conference and Exposition of the World Aquaculture Society, 26–30 June 2017, Cape Town, South Africa. (poster presentation)
- Atkinson L, **Leslie R[W]**, Sink K, Griffiths C, Landschoff J, Florence W, Samaai T, Herbert D, Mah C, Olbers J, Filander Z, Gibbons M[J]. 2017. The value of foundational biodiversity knowledge in tracking environmental change. 16th Southern African Marine Science Symposium (SAMSS), 4–7 July 2017, Port Elizabeth, South Africa. (oral presentation)
- Auerswald L, Knapp JL, Bridges CR, Krohn J, Hoffman LC. 2017. Physiological response of Jasus Ialandii to chronic hypercapnia. 16th Southern African Marine Science Symposium (SAMSS), 4–7 July 2017, Port Elizabeth, South Africa. (poster presentation)
- Brink M, Kuys RD, Rhode C, **Macey BM**, **Christison KW**, Roodt-Wilding RW. 2017. Genetic diversity in the sea urchin *Tripneustes gratilla*. The Annual International Conference and Exposition of the World Aquaculture Society, 26–30 June 2017, Cape Town, South Africa. (poster presentation)
- **Christison KW**. 2017. Aquaculture, fisheries and aquatic animal health in South Africa. *DAFF Annual Research Seminar*, 17–18 October, 2017, Pretoria, South Africa. (oral presentation)
- **Cockcroft AC**, Branch GM, Berg M, **van Zyl D[L]**. 2017. Is the ban on harvesting of berried female lobsters in South Africa justified on biological, economic and management grounds? 16th Southern African Marine Science Sym-

- posium (SAMSS), 4-7 July 2017, Port Elizabeth, South Africa. (oral presentation)
- Currie J, Atkinson L, Sink K, Winker H, Durholtz [M]D, Leslie R[W], Attwood C[G]. 2017. A century of change in South Africa's inshore trawl communities: 1903/4 vs 2015. Ocean's Past VI International Conference, 16–18 May 2017, Sesimbra, Portugal. (oral presentation)
- Cyrus MD, Bolton JJ, Wozniak D, Macey BM. 2017. Settlement, metamorphosis and post-settlement survival of the sea urchin *Tripneustes gratilla* for aquaculture production. *The Annual International Conference and Exposition of the World Aquaculture Society, 26–30 June 2017, Cape Town, South Africa.* (poster presentation)
- Cyrus MD, Hendricks A. 2017. Cryopreservation procedures for local algal masters stock used in aquaculture. The Annual International Conference and Exposition of the World Aquaculture Society, 26–30 June 2017, Cape Town, South Africa. (oral presentation)
- Cyrus MD, Wozniak D, Bolton JJ, Macey BM. 2017. An overview of echinoculture development in South Africa. The Annual International Conference and Exposition of the World Aquaculture Society, 26–30 June 2017, Cape Town, South Africa. (poster presentation)
- Damon A, Gibbons M[J], Götz A, Bernard A, Kerwath S[E], Samaai T. 2017. Distribution of the benthic invertebrate community and ichthyofauna associated with Walters Shoal seamount. 16th Southern African Marine Science Symposium (SAMSS), 4–7 July 2017, Port Elizabeth, South Africa. (poster presentation)
- Davids A, **Leslie RW**, Gibbons MJ. 2017. Distributional overlap between two squaloid sharks, *Squalus acutipinnis* and *Squalus mitsukurii*, caught as bycatch off the coast of South Africa. 16th Southern African Marine Science Symposium (SAMSS), 4–7 July 2017, Port Elizabeth, South Africa. (oral presentation)
- Davids A, Smale MJ, **Leslie RW**, Gibbons MJ. 2017. The dietary habits of sympatric dogfish *Squalus acutipinnis* and *Squalus mitsukurii* caught as bycatch off the coast of South Africa. 4th South African Sharks and Rays Symposium, 10–13 September 2017, Hermanus, South Africa. (oral presentation)
- de Jager K, Bolton JJ, **Macey BM**. 2017. Microorganisms associated with *Ulva* cultivated in an integrated aquaculture system with abalone, and implications for biosecurity. *The Annual International Conference and Exposition of the World Aquaculture Society, 26–30 June 2017, Cape Town, South Africa*. (oral presentation)
- De Wet L, Malherbe C, Stander H, **Goodman M**. 2017. Evaluating black soldier fly oil in diets for rainbow trout (*Onchorhynchus mykiss*). The Annual International Conference and Exposition of the World Aquaculture Society, 26–30 June 2017, Cape Town, South Africa. (poster presentation)
- Du Randt A, Pitcher G[C], Probyn T[A], Mansfield L[M]. 2017. Establishing the suitability of Nandoni Sam for the cage culture of *Tilapia* spp. The Annual International Conference and Exposition of the World Aquaculture Society, 26–30 June 2017, Cape Town, South Africa. (poster presentation)
- Dyer DC, Bolton JJ, Smit AJ, **Anderson RJ**. 2017. Variability in stable isotope signatures of *Ecklonia maxima* and *Laminaria pallida*: implications for kelp forest food web studies. 30th Congress of the Phycological Society of Southern Africa, 12–16 January 2017, De Hoop, South Africa. (poster presentation)
- Dyer A, Götz A, Bernard A, **Kerwath S[E]**. 2017. Disentangling the influence of spatial and environmental processes in

- structuring warm-temperate reef fish communities. 16th Southern African Marine Science Symposium (SAMSS), 4–7 July 2017, Port Elizabeth, South Africa. (oral presentation)
- Emanuel MP, Pillay D, van der Merwe M, **Auerswald L**. 2017. Warming effects on high shore soft sediment ecosystems: the interactive role of autogenic engineering and grazing. 16th Southern African Marine Science Symposium (SAMSS), 4–7 July 2017, Port Elizabeth, South Africa. (oral presentation)
- Etwarysing WL, Bolton JJ, Beukes DR, **Macey BM**, **Cyrus MD**. 2017. Feed stimulants from green alga *Ulva* for sea urchin *Tripneustes gratilla*. The Annual International Conference and Exposition of the World Aquaculture Society, 26–30 June 2017, Cape Town, South Africa. (oral presentation)
- Etwarysing [W]L, **Cyrus MD**, Bolton JJ, Beukes DR, **Macey BM**. 2017. *Ulva* phagostimulants for the sea urchin *Tripneustes gratilla*. 30th Congress of the Phycological Society of Southern Africa, 12–16 January 2017, De Hoop, South Africa. (oral presentation)
- Fleischman MJ, Bolton JJ, **Rothman MD**. Cultivating *Macrocystis pyrifera* (Laminariales) 'angustifolia' ecomorph for abalone feed, through holdfast fragmentation and vegetative propagation. 30th Congress of the Phycological Society of Southern Africa, 12–16 January 2017, De Hoop, South Africa. (oral presentation)
- Foord CJ, Coyne VE, Pitcher GC, Macey BM. Accumulation of Paralytic Shellfish Poisoning Toxin in the abalone Haliotis midae and potential vectors. The Annual International Conference and Exposition of the World Aquaculture Society, 26–30 June 2017, Cape Town, South Africa. (oral presentation)
- **Foord J**, Coyne V, **Macey B**, **Pitcher GC**. 2017. Paralytic shellfish poisoning toxin accumulation in the abalone Haliotis midae. 11th International Conference on Molluscan Shellfish Safety, 14–18 May 2017, Galway, Ireland. (oral presentation)
- Fouche CH, Goodman M. 2017. Development of sperm cryopreservation methods for four South African marine finfish species (Argyrosomus japonicus, Pomadasys commersonnii, Liza richardsonii and Lithognathus aureti). The Annual International Conference and Exposition of the World Aquaculture Society, 26–30 June 2017, Cape Town, South Africa. (poster presentation)
- Geja Y, van der Lingen C[D], van der Westhuizen J[J], Fairweather T[P]. 2017. Spatio-temporal distribution of redeye roundherring (*Etrumeus whiteheadi*) catches by the small pelagic fishery off South Africa's coast. 16th Southern African Marine Science Symposium (SAMSS), 4–7 July 2017, Port Elizabeth, South Africa. (poster presentation)
- Götz A, Freier U, **Kerwath S[E]**, **Auerswald L**, Yilmaz N, Teschke P, Nerke G. 2017. Climate-change and Antarctic krill. 16th Southern African Marine Science Symposium (SAMSS), 4–7 July 2017, Port Elizabeth, South Africa. (poster presentation)
- Golla TR, Sandoval-Castillo J, van der Lingen C[D], Beheregaray L, Chiazzari B, Jansen van Vuuren B, Teske P. 2017. A genomic appraisal of the stock structure of the South African sardine, Sardinops sagax. 16th Southern African Marine Science Symposium (SAMSS), 4–7 July 2017, Port Elizabeth, South Africa. (oral presentation)
- Gon O, Okamoto M, **Leslie R[W]**, Gouws G, Golani D, Goren M, Stern N. 2017. Progress on the taxonomy and systematics of three Indo-Pacific fish genera. 10th Indo-Pacific Fish Conference, 2–6 October 2017, Tahiti,

- French Polynesia.
- Green A, Dlamini N, Kerwath SE, Wiles E, Dladla N, Sink K. 2017. The Eastern Cape shelf: exciting new insights from multibeam bathymetry. 16th Southern African Marine Science Symposium (SAMSS), 4–7 July 2017, Port Elizabeth, South Africa. (oral presentation)
- Groenewald G, Moloney C, van der Lingen C[D]. 2017. Influence of temperature and food availability on anchovy (Engraulis encrasicolus) dynamics as seen through a dynamic energy budget (DEB) model. ICES/PICES Symposium on Drivers of Dynamics Of Small Pelagic Fish Resources, 6–11 March 2017, Victoria, BC, Canada. (oral presentation)
- Hendricks AL, Goodman M, Cyrus MD. 2017. Cryopreservation procedures for local algal masters stock used in aquaculture. The Annual International Conference and Exposition of the World Aquaculture Society, 26–30 June 2017, Cape Town, South Africa. (poster presentation)
- Hendricks J, Reed C[C], **van der Lingen C[D]**. 2017. Parasites infecting Scomber japonicus (chub mackerel) in South Africa. 16th Southern African Marine Science Symposium (SAMSS), 4–7 July 2017, Port Elizabeth, South Africa. (poster presentation)
- Hoareau TB, Bloomer P, Fennessy S, Gouws G, Klopper A, Mann B, **Parker D**. 2017. DNA barcoding of South Africa's linefishes. *Symposium of Contemporary Conservation Practice*, 6–10 November 2017, Howick, South Africa. (oral presentation)
- John A, Cyrus MD, Bolton JJ, Vine N, Macey BM. 2017. Effect of feeds, feeding regimes and stocking density on the growth and gonad quality of *Tripneustes gratilla* under farm conditions. *The Annual International Con*ference and Exposition of the World Aquaculture Society, 26–30 June 2017, Cape Town, South Africa. (oral presentation)
- Kutu V, Macey BM, Bellstedt D, Mouton A. 2017. Towards the development of a vaccine against lactococcosis in farmed rainbow trout. The Annual International Conference and Exposition of the World Aquaculture Society, 26–30 June 2017, Cape Town, South Africa. (oral presentation)
- Laubscher MR, Spolander B, **Christison KW**. 2017. Biosecurity and treatment of fungal pathogens infecting loggerhead sea turtles (*Caretta caretta*) in South Africa. 3rd International Congress on Parasites of Wildlife, 24–27 September 2017, Kruger National Park, Skukuza, South Africa. (oral presentation)
- Lewis BR, Molatelo J, Madibana MJ. 2017. Effects of two commercial dusky kob diets and a traditional trout meal on the growth performance of juvenile dusky kob (Argyrosomus japonicus). The Annual International Conference and Exposition of the World Aquaculture Society, 26–30 June 2017, Cape Town, South Africa. (poster presentation)
- Lutchminarayan K, Bolton JJ, **Rothman MD**. 2017. Environmental control of distribution in South African kelps. 30th Congress of the Phycological Society of Southern Africa, 12–16 January 2017, De Hoop, South Africa. (poster presentation)
- Maapea A, Vine N, Macey BM, Clarke A. 2017. Development of an egg disinfection protocol for the dusky kob (Argyrosomus japonicus), a marine aquaculture finfish species. The Annual International Conference and Exposition of the World Aquaculture Society, 26–30 June 2017, Cape Town, South Africa. (poster presentation)
- Mackintosh A, Reed C[C], van der Lingen C[D]. 2017. Parasites of the South African angelfish, *Brama brama*

- (Bonnaterre, 1788). 16th Southern African Marine Science Symposium (SAMSS), 4–7 July 2017, Port Elizabeth, South Africa. (poster presentation)
- Mackintosh A, Reed C[C], van der Lingen C[D]. 2017. Preliminary investigation into the parasites infecting two species of gurnards off South Africa. 16th Southern African Marine Science Symposium (SAMSS), 4–7 July 2017, Port Elizabeth, South Africa. (poster presentation)
- Mbokane EM, Moyo N, Fouche CH. 2017. A preliminary investigation into the potential effect of *Artemisia afra* on growth, some hematology and biochemical parameters and disease resistance in sub-adults of *Oreochromis mossambicus*. The Annual International Conference and Exposition of the World Aquaculture Society, 26–30 June 2017, Cape Town, South Africa. (oral presentation)
- McGrath A, van der Lingen C[D], Moloney C, Hermes J, Roy C, Herbette S, Cambon D. 2017. Modelling effects of spatio-temporal spawning variability on the transport and retention success of sardine (*Sardinops sagax*) eggs around South Africa. 16th Southern African Marine Science Symposium (SAMSS), 4–7 July 2017, Port Elizabeth, South Africa. (oral presentation)
- McMillan P, Gon O, **Leslie R[W]**, Miya T. 2017. New records of *Macrourus* (grenadiers) in the southern hemisphere. 10th Indo-Pacific Fish Conference, 2–6 October 2017, Tahiti, French Polynesia. (poster presentation)
- McMillan P, Gon O, **Leslie R[W]**, Miya T. 2017. New records of the distribution of four grenadier fishes of the genus *Macrourus* (Gadiformes: Macrouridae) in the southeast Atlantic and west Indian Ocean sectors of the Southern Ocean based on genetic and morphological analyses of samples from the toothfish longline fishery. 10th Indo-Pacific Fish Conference, 2–6 October 2017, Tahiti, French Polynesia. (oral presentation)
- Mdlalose TI, Jansen van Rensburg PJ, Christison KW, Vosloo A. 2017. Untargeted metabolomics analyses of cultured dusky kob Aryrosomus japonicus in South Africa. The Annual International Conference and Exposition of the World Aquaculture Society, 26–30 June 2017, Cape Town, South Africa. (oral presentation)
- Mitchell D, **Christison KW**, Van As LL, Vaughan DB. 2017. Hexabothriid parasites from Rajidae species of South Africa. 3rd International Congress on Parasites of Wildlife, 24–27 September 2017, Kruger National Park, Skukuza, South Africa. (oral presentation)
- Mobara A, Reed C[C], van der Lingen C[D]. 2017. Application of a multiple method approach for stock identification and discrimination of South African kingklip, Genypterus capensis (Smith 1874). 16th Southern African Marine Science Symposium (SAMSS), 4–7 July 2017, Port Elizabeth, South Africa. (oral presentation)
- Madibana MJ, Mlambo V, Lewis BR, Fouché CH. 2017. Growth, heamatology, and gut histology of juvenile dusky kob (Argyrosomus japonicus) offered seaweed (Ulva sp.)based diets. The Annual International Conference and Exposition of the World Aquaculture Society, 26–30 June 2017, Cape Town, South Africa. (poster presentation)
- Nicolle N, **Christison KW**, Cole G, Laubscher M. 2017. Development of a non-lethal diagnostic tool for the diagnosis of *Ichthyophonus hoferi*. 3rd *International Congress on Parasites of Wildlife*, 24–27 September 2017, Kruger National Park, Skukuza, South Africa. (poster presentation)
- Nicolle N, Cole G, **Christison KW**, Laubscher M. 2017. The development of a non-lethal diagnostic tool for the diagnosis of *Ichthyophonus hoferi*. The Annual International Conference and Exposition of the World Aquaculture

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