Curriculum vitae

PERSONAL PARTICULARS

Full name : Anthony John Booth

Home address: 7 Rietfontein Place, Grahamstown 6139

South Africa

Work address: Department of Ichthyology and Fisheries Science

Rhodes University, PO Box 94, Grahamstown 6140

South Africa

Telephone : +27 (46) 603 7410 (Work) +27 (83) 310 0701 (Cell)

Fax : +27 (46) 622 4827 Email : t.booth@ru.ac.za

Born : 18 October 1970, Harare, Zimbabwe Nationality : South African (ID # 701018 5074 087)

Marital status: Married to Maretha Potgieter. One son, Alexander Ian

Booth (5 years)

Languages : English and Afrikaans (Read, write and speak fluently),

Xhosa (Read, write and speak fairly)

EDUCATION

1994-1997 Rhodes University, Grahamstown

Doctor of Philosophy in Fisheries Science

<u>Thesis title:</u> Biology, stock assessment and management of the panga

Pterogymnus laniarius on the Agulhas Bank, South Africa.

1993 Rhodes University, Grahamstown

Bachelor of Science (Honours) in Ichthyology and Fisheries Science

(Resource Management), with distinction

1990-1992 Rhodes University, Grahamstown

Bachelor of Science in Zoology and Computer Science

SCHOLARSHIPS, BURSARIES AND AWARDS

2003	Vice-Chancellor's Distinguished Research Award, Rhodes University
2002	Fulbright Visiting Scholar
2000	International Foundation for Science Scholarship, IFS/DANIDA Award ¹
1998	International Foundation for Science Scholarship ² , Alty Award

ACADEMIC POSITIONS HELD

2014-	Deputy Dean of Science
2009 -	Member of Senate
2009 -	Professor, Rhodes University
2004 - 2008	Associate Professor, Rhodes University
2002 - 2003	Meek Professor, University of Alaska Fairbanks
2001 - 2003	Senior Lecturer, Rhodes University

¹ Awarded for noteworthy peer-reviewed research in the sub-Saharan region.

1

² First South African to receive an IFS research grant.

1998 - 2000 Lecturer, Rhodes University

1998 - Member of the Board of the Faculty of Science

WORK EXPERIENCE

WORK EXPE	
2014	Conducted an R workshop at Nelson Mandela Metropolitan University,
	George Campus
	Conducted an R workshops at Rhodes University
2013	Conducted an R workshop at Nelson Mandela Metropolitan University,
	Port Elizabeth Campus
2008	Contracted by NOAA, USA to conduct a stock assessment on Alaskan
	sablefish, Anoplopoma fimbria that included additional remote-sensed
	environmental variables into the analysis.
2007	Held an advanced workshop in Namibia on fish stock assessment
2006	Acting Head of Department (1/7/2006 – 31/12/2006)
2005	Contracted to conduct a stock assessment on the South Africa stock of
	monkfish, Lophius vomerinus, by the Department of Environmental
	Affairs and Tourism, South Africa
	Held a workshop at NatMIRC, Namibia on the development of stock
2004	assessment models to scientists.
2004	Held a workshop at the INDP in Mindelo, São Vicente, Cape Verde on
2002	the development of stock assessment models to scientists.
2003	Held a workshop on the development of stock assessment models to
	scientists and graduate students at Marine and Coastal Management,
2002/2	Cape Town.
2002/3	Assisted with teaching a graduate-level course in mark-recapture
2001	methods, University of Alaska, Fairbanks USA.
2001	Invited to give a workshop on Geographical Information Systems. Participants were from Norway (IMR) and Russia (PINRO).
2000	Forth Workshop on assessment of shrimp and groundfish fisheries on the
2000	Brazil-Guyana shelf held in Cumana, Venezuela. Contributed by
	lecturing and training scientists in using multigear-multispecies per-
	recruit stock assessment models. This project was a continuation of the
	Third Workshop held in Belém, Brazil during 1999.
1999	Third Workshop on assessment of shrimp and groundfish fisheries on the
1,,,,	Brazil-Guyana shelf held in Belém, Brazil. Contributed by lecturing and
	training scientists in using multigear-multispecies per-recruit stock
	assessment models.
	Lectured courses on stock assessment, fisheries management and life-
	history theory to the South African Fisheries Inspectorate between the 12-
	14 October.
1998-	Lecturer (and promoted to Senior Lecturer from 2001, Associate
	Professor (2004-2008) and to Professor (from 2009) in Fisheries Science,

Masters and PhD degree level.

Department of Ichthyology and Fisheries Science, Rhodes University. Responsibilities include co-ordinating the 2^{nd} year course, lecturing of 2^{nd} , 3^{rd} year and honours students. Supervision of students at the honours,

Lectured at a *FAO/DANIDA* workshop on high-level age-structured fish stock assessment models held in Swakopmund, Namibia

.

PROFESSIONAL RECORD

Member for the South African National Committee for the *Scientific Committee for Oceanic Research*³ and Technical advisor to the *Fishery/Aquatic GIS Research Group*.

Approached to appraise research proposals for the *National Science Foundation* (USA), *National Research Foundation* (RSA), *Natural Sciences and Engineering Research Council of Canada*, and the *North Atlantic Treaty Organisation*.

National Research Foundation scientific rating: C2

Authored/co-authored 108 peer reviewed scientific articles and a book review (Appendix A).

I am an Associate Editor for the African Journal of Aquatic Science and have peer-reviewed manuscripts for the journals African Journal of Aquatic Science, African Journal of Marine Science, African Journal of Tropical Hydrobiology and Fisheries, African Journal of Zoology, Belgium Journal of Zoology, Canadian Journal of Fisheries and Aquatic Sciences, Copeia, Environmental Biology of Fishes, Fisheries Ecology and Management, Fisheries Research, Hydrobiologia, ICES Journal of Marine Science, Journal of Applied Ichthyology, Journal of Fish Biology, Journal of Great Lakes Research, Koedoe, Marine and Freshwater Science, Marine Biology Research (formerly SARSIA and Ophelia) and US Fishery Bulletin.

Invited to be on the organising committee and co-edit the peer-reviewed proceedings of the 17th Lowell Wakefield Fisheries Symposium, Anchorage Alaska, 1999 on *Spatial Processes and Management of Fish Populations*.

I was the invited as the keynote speaker at the *Second International Symposium on Spatial Analysis/GIS in the Aquatic Sciences* held in September 2002 at the University of Sussex, UK.

SUPERVISORY EXPERIENCE

(Co-)supervised 16 MSc and seven PhD theses (Appendix B).

Two MSc students were awarded the $S_2A_3^4$ Bronze medal. See details in Appendix B.

³ http://www.scor-int.org/memnats.htm

 $^{^4}$ The South African Association for the Advancement of Science (S_2A_3) awards a medal annually to the best MSc thesis from each of six South African Universities.

I have examined MSc and PhD theses from the University of Cape Town, Nelson Mandela Metropolitan University, Walter Sisulu University, University of Namibia, University of Tasmania, Deakin University, and the Carl von Ossietzky Universität, Oldenburg.

I am currently an external examiner for both Walter Sisulu University, and the University of Fort Hare.

COMPUTER SKILLS

Fully computer literate with programming proficiency in *C*, *Visual Basic*, *R* and *AD-Model Builder*.

RESEARCH INTERESTS AND CURRENT PROJECTS

Research interests lie in quantitative fisheries biology and ecology, concentrating on fish biology and their management in southern Africa. Current research focuses on quantitative ecology and the life history patterns of freshwater and marine fishes, specifically sharks.

APPENDIX A - PUBLICATIONS

Research publications in peer-reviewed books and journals

In preparation

- 1. Winker, H., Booth, A.J., Kerwath, S.E. & Attwood, C.G. Evidence for resource recovery by two fishes a decade after a large reduction in fishing effort.
- 2. Booth, A.J. & Winker, H. Effects of formalin fixation and long- and medium-term alcohol storage on the δ 13C and δ 15N signatures of several cyprinid fish species.
- 3. Winker, H., Booth, A.J. & Weyl, O.L.F. Estimating confidence intervals for the expected CPUE from delta-models: a model application to the analysis of gillnet and angler catch rates from Lake Gariep, South Africa.
- 4. Environmental Biology of Fishes.
- 5. Hewitt, A.M, Kock, A., Booth, A.J. & Griffiths, C.L. Population structure and sighting trends of white sharks at Seal Island, False Bay, South Africa. *Marine Biology*
- 6. Hewitt, A.M, Kock, A., Booth, A.J. & Griffiths, C.L. Photo-identification of white sharks at Seal Island, False Bay: recapture ratios, immigration, emigration and site fidelity, with a life-history hypothesis for the Western Indian Ocean stock
- 7. Hewitt, A.M, Kock, A., Booth, A.J. & Griffiths, C.L.Annual abundance, superpopulation size and apparent survival of white sharks at Seal Island, False Bay, South Africa

Under review

- 1. Smale, M.J., Dicken, M.L. & Booth, A.J. Seasonality, behaviour and philopatry of raggedtooth sharks, *Carcharias taurus* in Eastern Cape nursery areas, South Africa. *African Journal of Marine Science*
- 2. Da Silva, C., Booth, A.J., Dudley, S.F.J., Kerwath, S.E., Lamberth, S. J., Leslie, R.W., McCord, M.E., Sauer, W.H.H. & Zweig, T. A chondricythyan-centric overview of South Africa's fisheries. *African Journal of Marine Science*
- 3. Magellan, K., Booth, A.J. & Weyl, O.L.F. Innate interspecific information transfer induces varied responses to conspecific and heterospecific alarm signals. *Ethology*
- 4. Kadye, W.T. & Booth, A.J. Ecological niche partitioning explains coexistence patterns between native and non-native fishes within an invaded river. *Freshwater Biology*
- 5. Booth, A.J. & Thornycroft, R.E. Predicting coelacanth, *Latimeria chalumnae*, distribution using Random Forests. *African Journal of Marine Science*

In press

- 1. Parker, D. & Booth, A.J. Aspects of the life history of largespot pompano, *Trachinotus botla*, in South Africa. *Marine and Freshwater Research*
- 2. Wartenberg, R. & Booth, A.J. Video transecting is the most appropriate method of Underwater Visual Census for surveying high-latitude coral reef fishes in the south Western Indian Ocean. *Marine Biodiversity*
- 3. Booth, A.J., Moss, S. & Weyl, O.L.F. Effects of rotenone on gill-respiring and plastron respiring insects. *African Journal of Aquatic Science*

Published

- 1. Potts, W.M., Henriques, R., Santos, C.V., Munnik, K., Ansorge, I., Dufois, F., Booth, A.J., Kirchner, C., Sauer, W.H.H. & Shaw, P.W. 2014. Ocean warming contributes to a rapid distributional shift and hybridization of a coastal fish species. *Global Change Biology* 20: 2765-2777.
- 2. Hodgson, A.N., Booth, A.J., David-Engelbrecht, V. & Henninger, T.O. 2014. Some life-history parameters of the non-native amphipod *Platorchestia platensis* (Talitridae) in a warm temperate South African estuary. *Transactions of the Royal Society of South Africa* 69: 97-106.
- 3. Potts, W.M., Booth, A.J., Richardson, T.J. & Sauer, W.H.H. 2014. Ocean warming affects the distribution and abundance of resident fish species by changing their reproductive scope. *Reviews in Fish Biology and Fisheries* 24: 493-504.
- 4. Kadye, W.T. & Booth, A.J. 2014. Alternative responses to predation in two headwater stream minnows is reflected in their contrasting diel activity patterns. *PLoS ONE* 9(4): e93666.
- 5. Strydom, N.A., Booth, A.J. & McLachlan, A. 2014. Occurrence of larval fishes in rocky shore associated nursery area in temperate South Africa, with emphasis on temperature-related growth in dominant Sparidae. *African Journal of Marine Science* 36: 125-135.
- 6. Parker, D. & Booth, A.J. 2013. The tongue-replacing isopod *Cymothoa borbonica* reduces the growth of largespot pompano *Trachinotus botla*. *Marine Biology* 160: 2943-2950.
- 7. Wartenberg, R., Weyl, O.L.F., A. J. Booth & Winker, H. 2013. Life history characteristics of an age-validated established invasive African sharptooth catfish, *Clarias gariepinus*, population in a warm-temperate African impoundment. *African Zoology* 48: 318-325.
- 8. Kadye, W.T. & Booth, A.J. 2013. An invader within an altered landscape: one catfish, two rivers and an inter-basin water transfer scheme. *River Research and Applications* 29: 1131-1146.
- 9. Dicken, M.L., Smale, M.J. & Booth, A.J. 2013. White sharks *Carcharodon carcharias* at Bird Island, South Africa. *African Journal of Marine Science* 35: 175-182.
- 10. Zengeya, T., Robertson, M.P., Booth, A.J. & Chimimba, C.T. 2013. Ecological niche modeling of the invasive potential of Nile tilapia *Oreochromis niloticus* in African river systems: concerns and implications for the conservation of indigenous congenerics. *Biological Invasions* 15: 1507-1521.
- 11. Dicken, M.L. & Booth, A.J. 2013. Surveys of white sharks (*Carcharodon carcharias*) off bathing beaches in Algoa Bay, South Africa. *Marine and Freshwater Research* 64: 530-539.
- 12. Booth, A.J., Kadye, W.T., Vu, T. & Wright, M. 2013. Rapid colonisation of artificial substrates by macroinvertebrates in South African lentic environment. *African Journal of Aquatic Science* 38: 175–183.
- 13. Parker, D., Booth, A.J. & Mann B.Q. 2013. A spatio-temporal assessment of the *Trachinotus botla* shore fishery in KwaZulu-Natal, South Africa. *African Journal of Marine Science* 35: 35-46.

- Zengeya, T., Robertson, M.P., Booth, A.J., Bastos, A.D.S & Chimimba, C.T.
 2013. A qualitative ecological risk assessment for invasive Nile tilapia,
 Oreochromis niloticus in a sub-tropical African river system (Limpopo River,
 South Africa). Aquatic Conservation: Marine and Freshwater Ecosystems 23: 51-64.
- 15. Kadye, W.T. & Booth, A.J. 2013. Movement patterns and habitat selection of invasive African sharptooth catfish. *Journal of Zoology* 289: 41-51.
- 16. Kadye, W.T. & Booth, A.J. 2012. Inter-seasonal persistence and size-structuring of two minnow species within headwater streams in the Eastern Cape, South Africa. *Journal of Applied Ichthyology* 28: 791-799.
- 17. Dicken, M.L., Smale, M.J. & Booth, A.J. 2012. Long-term catch and effort trends in Eastern Cape Angling Week competitions. *African Journal of Marine Science* 34(2): 359-268.
- 18. Winker, H., Weyl, O.L.F., Booth, A.J. & Ellender, B.R. 2012. Life history strategy and population characteristics of an unexploited riverine cyprinid *Labeo capensis* in the largest impoundment in the Orange River Basin. *African Zoology* 47: 85-99.
- 19. Kadye, W.T. & Booth, A.J. 2012. Detecting impacts of invasive non-native sharptooth catfish, *Clarias gariepinus*, within invaded and non-invaded rivers. *Biodiversity and Conservation* 21: 1997-2015.
- 20. Kadye, W.T. & Booth, A.J. 2012. Integrating stomach content and stable isotope analyses to elucidate the feeding habits of non-native sharptooth catfish, *Clarias gariepinus*. *Biological Invasions* 14:779–795.
- 21. Thornycroft, R.E. & Booth, A.J. 2012. Computer-aided identification of coelacanths, *Latimeria chalumnae*, using scale patterns. *Marine Biology Research* 8: 300-306.
- 22. Smale, M.J., Booth, A.J., Farquhar, M.R., Meyer, M. & Rochat, L. 2012. Migration and habitat use of formerly captive and wild raggedtooth sharks (*Carcharias taurus*) on the southeast coast of South Africa. *Marine Biology Research* 8: 115-128.
- 23. Nakin, M.D.V., Booth, A.J. & McQuaid, C.D. 2012. Species-specific effects of marine reserves: mortality and growth differ within and among heavily exploited and rarely exploited limpets. *Marine Ecology Progress Series* 445: 53-63.
- 24. Stadtlander, T., Weyl, O.L.F. & A.J. Booth, A.J. 2011. New distribution record for the Asian tapeworm *Bothriocephalus acheilognathi* Yamaguti, 1934 in the Eastern Cape Province, South Africa. *African Journal of Aquatic Science* 36(3): 339-343.
- 25. Winker, H., Weyl, O.L.F., Booth, A.J. & Ellender, B.R. 2011. Life history and population dynamics of invasive common carp, *Cyprinus carpio*, within a large turbid African impoundment. *Marine and Freshwater Research* 62: 1270-1280.
- 26. Zengeya, T., Booth, A.J., Bastos, A.D.S & Chimimba, C.T. 2011. Trophic interrelationships between the exotic Nile Tilapia, *Oreochromis niloticus* and indigenous tilapiine cichlids in a subtropical African river system. *Environmental Biology of Fishes* 92: 479-489.

- 27. Parkinson, M. & Booth, A.J. 2011. The effect of water turbidity on the foraging success of the river goby *Glossogobius callidus*. *African Journal of Aquatic Science* 36 (2): 213-216.
- 28. Wartenberg, R., Booth, A.J. & Weyl, O.L.F. 2011. A comparison of three techniques for fluorochrome marking of juvenile *Clarias gariepinus* otoliths. *African Zoology* 46 (1): 72-77
- 29. Booth, A.J., Foulis, A.J. & Smale, M. J. 2011. Fluorochrome age validation, growth, mortality and demographic analysis of the spotted gully shark, *Triakis megalopterus*, from the southeast coast of South Africa. *Fishery Bulletin* 109(1):101–112.
- 30. Winker, H., Weyl, O.L.F., Booth, A.J. & Ellender, B.R. 2010. Validating and corroborating the growth zone deposition rates in astericus otoliths of common carp *Cyprinus carpio* L. from South Africa's largest impoundment. *Journal of Fish Biology* 77: 2210-2228.
- 31. Booth, A.J., Traas, G.R.L. & Weyl, O.L.F. 2010. Adult African sharptooth catfish, *Clarias gariepinus*, population dynamics in a small invaded warm-temperate impoundment. *African Zoology* 45(2): 299-308.
- 32. Henninger, T.O., Froneman, P.W., Booth, A.J. & Hodgson, A.N. 2010. Growth and longevity of *Exosphaeroma hylocoetes* (Isopoda) under varying conditions of salinity and temperature. *African Zoology* 45(1): 41–51.
- 33. Booth, A.J. & Khumalo, N. 2010. Age, growth, mortality and reproduction of *Marcusenius pongolensis*, *Oreochromis mossambicus* and *Schilbe intermedius* in an oligotrophic impoundment in Swaziland. *African Journal of Ecology* 48(2): 481-489.
- 34. Winker, H., Ellender, B., Weyl, O. L. F. & Booth, A. J. 2010. Validation of growth zone deposition in otoliths of two large endemic cyprinids in Lake Gariep, South Africa. *African Zoology* 45(1): 133-138.
- 35. Ellender, B.R., Weyl, O.L.F., Winker, H. & Booth, A.J. 2010. Quantifying the annual fish harvest from South Africa's largest reservoir. *Water SA* 36: 45-51.
- 36. Dicken, M.L., Booth, A.J. & Smale, M.J. 2009. Factors affecting recapture rates of raggedtooth sharks *Carcharias taurus* tagged off the east coast of South Africa. *African Journal of Marine Science* 31: 365-372.
- 37. Richardson, T.R., Booth, A.J. & Weyl, O.L.F. 2009. Rapid biological assessment of the fishery potential of Xonxa Dam near Queenstown, South Africa. *African Journal of Aquatic Science* 34: 87-96.
- 38. Weyl, O.L.F., Stadtlander, T. & Booth, A.J. 2009. Establishment of translocated populations of smallmouth yellowfish, *Labeobarbus aeneus* (Pisces: Cyprinidae), in lentic and lotic habitats in the Great Fish River system, South Africa *African Zoology* 44(1):93-105
- 39. Childs, A-R., Booth, A.J., Cowley, P.D., A.J., Potts, W.M., Naesje, T.F., Thorstad, E.B & Økland, F. 2008. Home range of an estuarine-dependent fishery species *Pomadasys commersonnii* in a South African estuary. *Fisheries Management and Ecology* 15: 441-448.
- 40. Rutaisire, J., Levavi-Sivan, B., Nyatia, E. & Booth, A.J. 2008. Juvenile intersexuality in the cyprinid fish *Labeo victorianus*. *Cybium* 32 (2) Suppl.: 232.

- 41. Weyl, O.L.F. & Booth, A.J. 2008. Validation of annulus formation in otoliths of a temperate population of adult African sharptooth catfish *Clarias gariepinus* (Burchell, 1822) using fluorochrome marking of wild fish. *Journal of Fish Biology* 73: 1033-1038.
- 42. Grandcourt, E., Hecht, T., Booth, A.J. & Robinson, J. 2008. A retrospective stock assessment of the Emperor red snapper, *Lutjanus sebae* (Cuvier, 1816), on the Seychelles Bank between 1977 and 2006. *ICES Journal of Marine Science* 65:889-898.
- 43. Childs, A-R., Cowley, P.D., Naesje, T.F., Booth, A.J., Potts, W.M., Thorstad, E.B & Økland, F. 2008. Estuarine use by spotted grunter *Pomadasys commersonnii* in a South African estuary, as determined by acoustic telemetry. *African Journal of Marine Science* 30: 123–132.
- 44. Booth, A.J. & Weyl, O.L.F. 2008. Retention of T-bar anchor and dart tags by a wild population of African sharptooth catfish, *Clarias gariepinus*. *Fisheries Research* 92: 333-339.
- 45. Childs, A-R., Cowley, P.D., Naesje, T.F., Booth, A.J., Potts, W.M., Thorstad, E.B & Økland, F. 2008. Do environmental factors influence the movement of an estuarine fish? A case study using acoustic telemetry. *Estuarine Coastal and Shelf Science* 78:227-236.
- 46. Dicken, M.L., Booth, A.J & Smale, M.J. 2008. Estimates of juvenile and adult raggedtooth shark (*Carcharias taurus*) abundance along the east coast of South Africa. *Canadian Journal of Fisheries and Aquatic Sciences* 65: 621-632.
- 47. Simon, C. & Booth, A.J. 2007. Population structure and growth of polydorid polychaetes that infest the cultured abalone, *Haliotis midae*. *African Journal of Marine Science* 29: 499-509.
- 48. Dicken, M.L., Smale, M.J., and Booth, A.J. 2007. Spatial and seasonal distribution patterns of juvenile and adult raggedtooth sharks (*Carcharias taurus*) tagged off the east cost of South Africa. *Marine and Freshwater Research* 58: 127-134
- 49. Olyott, L.J.H., Sauer, W.H.H. & Booth, A.J. 2007. Spatial patterns in the biology of the chokka squid, *Loligo reynaudii* on the Agulhas Bank, South Africa *Reviews in Fish Biology and Fisheries* 17: 159-172.
- 50. Booth, A.J. & Potts. 2006. Estimating gill-net selectivity *for Labeo umbratus* (Pisces:Cyprinidae) and an evaluation of using fyke-nets as a non-destructive sampling gear in small reservoirs. *Fisheries Research* 79: 202-209.
- 51. Booth, A.J. & Quinn II, T.J. 2006. Bayesian and maximum likelihood approaches to stock assessment when abundance indices are questionable. *Fisheries Research* 80: 169-181.
- 52. Dicken, M.L. Smale, M.J. & Booth, A.J. 2006. Shark fishing effort and catch of the raggedtooth shark (*Carcharias taurus*) in the South African competitive shore angling fishery. *African Journal of Marine Science* 28(3&4): 589-601.
- 53. Dicken, M.L. Smale, M.J. & Booth, A.J. 2006. Spatial and seasonal distribution patterns of the raggedtooth shark (*Carcharias taurus*) along the coast of South Africa *African Journal of Marine Science* 28(3&4): 603-616.
- 54. Dicken, M.L. Smale, M.J. & Booth, A.J. 2006. Preliminary observations of tag shedding, tag reporting, tag wounds and tag biofouling for raggedtooth sharks

- (*Carcharias taurus*) tagged off the east coast of South Africa. *ICES Journal of Marine Science* 63(9): 1640-1648.
- 55. Fairweather, T.P., van der Lingen, C.D. Booth, A.J., Drapeau, L. & van der Westhuizen, J.J. 2006. Indicators of sustainable fishing for South African sardine (*Sardinops sagax*) and anchovy (*Engraulis encrasicolus*). *African Journal of Marine Science* 28(3&4): 661-680.
- 56. Fairweather, T.P., Booth, A.J., Sauer, W.H.H. & Leslie, R.W. 2006. Spatial description of hake-directed fishing activity off the west coast of South Africa. *African Journal of Marine Science* 28(1): 13-24.
- 57. Lukey, J.R., Booth, A.J. & Froneman, P.W. 2006. Fish population size and movement patterns in a small intermittently open South African estuary. *Estuarine Coastal and Shelf Science* 67: 10-20.
- 58. Olyott, L.J.H., Sauer, W.H.H. & Booth, A.J. 2006. Spatio-temporal patterns in maturation of the chokka squid (*Loligo vulgaris reynaudii*) off the coast of South Africa. *ICES Journal of Marine Science* 63(9): 1649-1664.
- 59. Potts, W.M., Booth, A.J., Hecht T. & Andrew, T. 2006. The life history and fishery potential of *Labeo umbratus* (Teleostei: Cyprinidae) in five small South African reservoirs. *African Journal of Aquatic Science* 31(2): 285-295.
- 60. Potts, W.M., Booth, A.J., Hecht T. & Andrew, T. 2006. Predictor variables for moggel (*Labeo umbratus*) biomass and production in small South African reservoirs. *African Journal of Aquatic Science* 31: 107-118.
- 61. Scott, L. E. P., Skelton, P. H., Booth, A. J., Verheust, L., Harris, R. & Dooley, J. 2006. Atlas of Southern African Freshwater Fishes. *Smithiana Monograph* 2 303pp. ISBN: 0868103985
- 62. Rutaisire, J., Muwazi, R.T. & Booth, A.J. 2006. Ultrastructural description of spermiogenesis and spermatozoa in *Labeo victorianus*, Boulenger, 1901 (Pisces: Cyprinidae). *African Journal of Ecology* 44: 102-105.
- 63. Weyl, O.L.F., Booth, A.J., Mwakiyongo, K. & Banda, M.M. 2005. Per-recruit simulation as a rapid assessment tool for a multi-species small-scale fishery in Lake Malombe, Malawi, Africa. In: *Fisheries assessment and management in data -limited situations*. G.H. Kruse, V.F. Gallucci, D.E. Hay, R.I. Perry, R.M. Peterman, T.C. Shirley, P.D. Spencer, B. Wilson & D. Woodby (Eds). *University of Alaska Sea Grant Program AK-SG-05-02*. pp 235-254.
- 64. Kanyerere, G.Z., Booth, A.J. & Weyl, O.L.F. 2005. Management for the *Diplotaxodon limnothrissa* (Teleostei : Cichlidae) resource in the south-east arm of Lake Malawi, based on per-recruit analysis. *African Journal of Aquatic Science* 30(2): 151-155.
- 65. Potts, W.M., Booth, A.J., Hecht T. & Andrew, T. 2005. Reproductive biology of a riverine cyprinid, *Labeo umbratus* (Teleostei : Cyprinidae), in small African reservoirs. *African Journal of Aquatic Science* 30(2): 157-165.
- 66. Rutaisire, J., Booth, A.J., Masembe, C., Nyakaana, S. & Muwanika, V.B. 2005. Morphometric and genetic characterisation of two *Labeo victorianus* populations. *African Journal of Zoology* 40(2): 309-317.
- 67. Kanyerere, G.Z., Weyl, O.L.F. & Booth, A.J. 2005. Growth, reproduction and population structure of *Diplotaxodon limnothrissa* in the southeast arm of Lake Malawi. *African Journal of Aquatic Science* 30: 37-44.

- 68. Maartens, L & Booth, A.J. 2005. Aspects of the reproductive biology of monkfish, *Lophius vomerinus*, off Namibia. *South African Journal of Marine Science* 27: 325-329.
- 69. Beamish, C.A. Booth, A.J. & N. Deacon, N. 2005. Age, growth and reproduction of largemouth bass, *Micropterus salmoides*, in Lake Manyame, Zimbabwe. *African Zoology* 40: 63-69.
- 70. Rutaisire, J & Booth, A.J. 2005. Reproductive biology of ningu *Labeo victorianus* (Pisces: Cyprinidae) in the Kagera and Sio Rivers, Uganda. *Environmental Biology of Fishes* 73: 153-162.
- 71. Rutaisire, J. & Booth A.J. 2005. A histological description of ovarian recrudescence in two populations of *Labeo victorianus* populations. *African Journal of Aquatic Science* 29: 221-228.
- 72. Weyl, O.L.F., Booth, A.J., Mwakiyongo, K.R. & Mandere, D.S. 2005. Management recommendations for *Copadichromis chrysonotus* (Pisces:Cichlidae) in Lake Malombe, Malawi, based on per-recruit analysis. *Fisheries Research* 71: 165-173.
- 73. Rutaisire, J., Booth, A.J., Masembe, C., Nyakaana, S. & Muwanika, V.B. 2004. Evolution of *Labeo victorianus* predates the Pleistocene desiccation of Lake Victoria: Evidence from mitochondrial DNA sequence variation. *South Africa Journal of Science* 100: 608-609.
- 74. Booth, A.J. 2004. Spatial statistics and aquatic GIS. *Proceedings of the Second International Symposium on GIS/Spatial Analysis in the Aquatic Sciences, Brighton.* T. Nishida, C.E. Hollingworth & P.J. Kailola (Eds.) Kurofune Printing, Japan. pp 3-44.
- 75. Rutaisire, J & Booth, A.J. 2004. Induced ovulation, spawning, egg incubation, and hatching of the cyprinid fish *Labeo victorianus* in captivity. *Journal of the World Aquaculture Society* 35: 383-391.
- 76. Weyl, O.L.F., Kazembe, J., Booth, A.J. & Mandere, D.S. 2004. An assessment of a light-attraction fishery in southern Lake Malawi. *African Journal of Aquatic Science* 29: 1- 11.
- 77. Booth, A.J. 2004. Determination of cichlid specific biological reference points. *Fisheries Research* 67:307-316.
- 78. Booth, A.J & Weyl, O.L.F. 2004. Investigations into a potential directed fishery for *Labeo cylindricus* in Lake Chicamba, Mozambique. *African Zoology* 39: 77-90.
- 79. Midgley, G.F., Hannah, L., Millar, D., Thuiller, W. & Booth, A.[J.] 2003. Developing regional and species-level assessments of climate change impacts on biodiversity in the Cape Floristic Region. *Biological Conservation* 112: 87-97.
- 80. Rutaisire, J., Muwazi, R.T. & Booth, A.J. 2003. The structure and cytology of the testes of *Labeo victorianus* (Pisces: Cyprinidae). *African Zoology* 38: 119-126.
- 81. Simon, C.A., Kaiser, H., Booth, A.J. & Britz, P.J. 2002. The effect of diet and live host presence on the growth and reproduction of *Terebrasabella heterouncinata* (Polychaeta: Sabellidae). *Invertebrate Reproduction and Development* 41:277-286.
- 82. Maartens, L. & Booth, A.J. 2001 Assessment of the *Lophius vomerinus* resource off Namibian waters. *In* A decade of Namibian fisheries science. A.I.L. Payne, S.C. Pillar and R.J.M. Crawford (Eds). *South African Journal of Marine Science*. 23:

- 275-290.
- 83. Maartens, L. & Booth, A.J. 2001 Quantifying monkfish, *Lophius vomerinus* and *L. vaillanti*, catch and effort in Namibian waters. *In* A decade of Namibian fisheries science. A.I.L. Payne, S.C. Pillar and R.J.M. Crawford (Eds). *South African Journal of Marine Science*. 23: 291-306.
- 84. Booth, A.J. & McKinlay, B.W. 2001. Spatial aspects to the reproductive and feeding biology of the striped robber *Brycinus lateralis* (Pisces: Characidae) inhabiting the Okavango Delta, Botswana. *African Zoology* 36(1): 31-40.
- 85. Booth, A.J. 2001. Are fisheries geographical information systems merely glorified mapping tools? In *Proceedings of the First Symposium of GIS in Fishery Science*. T. Nishida, C.E. Hollingworth & P.J. Kailola (Eds.) Kurofune Printing, Japan. pp 366-378.
- 86. Sampson, M.R., Britz, P.J., Booth, A.J. & Anderson, R. 2001. Comparison of manual and RS/GIS methods of assessing of kelp biomass off the Northern Cape coast of Southern Africa. pp 157-166. T. Nishida, C.E. Hollingworth & P.J. Kailola (Eds). In *Proceedings of the First Symposium of GIS in Fishery Science*. Kurofune Printing, Japan.
- 87. Nishida, T. and Booth, A.J. 2000. Recent methods and approaches using GIS in the spatial analysis of fish populations. *In* Spatial processes and the management of marine populations. G.H. Kruse, N. Bez, A.J. Booth, M.W. Dorn, S. Hills, R.N. Lipcius, D. Pelletier, C. Roy, S.J. Smith and D. Witherell (Eds). University of Alaska Sea Grant, AK-SG-01-02, Fairbanks. pp19-36.
- 88. Maree, R.C., Whitfield, A.K. & Booth, A.J. 2000. The effect of water temperature on the biogeography of estuarine fish associated with the subtropical/warm temperature subtraction zone. *South African Journal of Science* 96: 184-189.
- 89. Booth, A.J. 2000. Incorporating the spatial component of fisheries data into stock assessment models. *ICES Journal of Marine Science* 57: 858-865.
- 90. Booth, A.J. & Weyl, O.L.F. 2000. Histological validation of gonadal macroscopic staging criteria for *Labeo cylindricus* (Pisces: Cyprinidae). *African Zoology* 35: 223-231.
- 91. Booth, A.J. & Walmsley-Hart, S.A. 2000. On the life history of the redspotted tonguefish *Cynoglossus zanzibarensis* (Pisces: Cynoglossidae) inhabiting the Agulhas Bank, South Africa. *South African Journal of Marine Science* 22: 185-197.
- 92. Scott, L.E.P., Skelton, P.H., Booth, A.J. & Verheust, L. 2000. The development of a GIS atlas of southern African freshwater fish. *African Journal of Aquatic Science* 25: 43-48.
- 93. Weyl, O.L.F. & Booth, A.J. 1999. On the life history of a cyprinid fish, *Labeo cylindricus*. *Environmental Biology of Fishes* 55: 215-225.
- 94. Maartens, L., Booth, A.J. & Hecht, T. 1999. Growth of monkfish *Lophius vomerinus* (Pisces: Lophiidae) from Namibian waters, with a comparison of otolith and illicia methods of ageing. *Fisheries Research* 44: 139-148.
- 95. Booth A.J., Brouwer, S.L. & Hecht, T. 1999. Considerations on the feasibility of a directed fishery for panga *Pterogymnus laniarius* (Pisces: Sparidae). *South African Journal of Marine Science* 21: 77-89.
- 96. Booth, A.J. & Punt, A.E. 1998. Evidence for rebuilding in the panga stock on the

- Agulhas Bank, South Africa. Fisheries Research 34: 103-121.
- 97. Booth, A.J. & Hecht, T. 1998. Changes within the Eastern Cape demersal inshore trawlfishery from 1967-1995. *In* Benguela Dynamics: Impacts of Variability on Shelf-sea Environments and their Living Resources. Pillar, S.C., Moloney, C.L., Payne, A.I.L. and F.A. Shillington (Eds). *South African Journal of Marine Science* 19: 341-353.
- 98. Booth, A.J. 1998. Spatial analysis of fish distribution and abundance: A GIS approach. *In* Fisheries Stock assessment models. F. Funk, T.J. Quinn II, J. Heifetz, J.N. Ianelli, J.E. Powers, J.F. Schweigert, P.J. Sullivan and C-I. Zhang. (Eds). *Alaska Sea Grant College Program Report No.* AK-SG-98-01, University of Alaska Fairbanks. pp 719-740.
- 99. Booth, A.J. & Isted, E.D. 1997. Comparison of methods used to convert length-frequency data. *Fisheries Research* 29: 271-276.
- 100. Marriott, M.S., Booth, A.J. & Skelton, P.H. 1997. Reproductive and feeding biology of the Natal mountain catfish *Amphilius natalensis* (Siluroidei: Amphiliidae). *Environmental Biology of Fishes* 49: 461-470.
- 101. Booth, A.J. & Buxton, C.D. 1997. The biology of the panga, *Pterogymnus laniarius* (Teleostei: Sparidae), on the Agulhas Bank, South Africa. *Environmental Biology of Fishes* 49: 207-226.
- 102. Booth A.J. & Hecht, T. 1997. Description of gametogenesis in the panga *Pterogymnus laniarius* (Pisces: Sparidae) with comments on changes in maturity patterns over the past two decades. *South African Journal of Zoology* 32:49-53.
- 103. Booth, A.J. & Buxton, C.D. 1997. The management of the panga *Pterogymnus laniarius* (Pisces: Sparidae) on the Agulhas Bank, South Africa using per-recruit models. *Fisheries Research* 32: 1-11.
- 104. Booth, A.J. 1997. On the life-history of the lesser gurnard (Scorpaeniformes: Triglidae) inhabiting the Agulhas Bank, South Africa. *Journal of Fish Biology* 51: 1155-1173.
- 105. Booth, A.J. 1996. Microstructure and distribution of epidermal taste-buds on the Natal mountain catfish *Amphilius natalensis*. *South African Journal of Science* 92: 495-496.
- 106. Booth, A.J. 1996. Description of a leucotic morph of the panga fish *Pterogymnus laniarius* (Perciformes: Sparidae) off South Africa. *South African Journal of Science* 92: 440-441.
- 107. Booth, A.J. & Merron, G.S. 1996. The age and growth of the greenhead tilapia *Oreochromis macrochir* (Pisces: Cichlidae) from the Okavango Delta, Botswana. *Hydrobiologia* 321: 29-34.
- 108. Booth, A.J., Merron, G.S. & Buxton, C.D. 1995. The growth of *Oreochromis andersonii* (Pisces: Cichlidae) from the Okavango Delta, Botswana, and a comparison of the scale and otolith methods of ageing. *Environmental Biology of Fishes*. 43: 171-178.

Book chapter

Booth, A.J. & Wood, B. 2004. GIS applications in offshore marine fisheries. *In*: Applications of GIS in fisheries. W.L. Fisher & F.J Rahel (eds). *American Fisheries Society*. 209-235 pp.

- Other scientific articles (some but not all are peer-reviewed)
- Booth, A.J. 2005. The importance of ageing in the assessment of the Cape Verde's marine resources. *In* Proceedings of the INDP Annual Science Council Meeting, Mindelo, São Vicente, Cabo Verde.
- Kanyerere, G.Z. & Booth, A.J. 2001. Spatial and temporal distribution of some commercially important fish species in the southeast arm of Lake Malawi: A Geostatistical Analysis. *In* Proceedings of the Lake Malawi Fisheries Management Symposium, 4th 9th June 2001, Lilongwe. O.L.F. Weyl and M.V. Weyl (eds), pp 173-188.
- Booth, A.J. 2001. Determination of biological reference points for Lake Malawi cichlids. *In* Proceedings of the Lake Malawi Fisheries Management Symposium, 4th 9th June 2001, Lilongwe. O.L.F. Weyl and M.V. Weyl (eds). pp 248-260.
- Booth, A.[J], Charau, A, Cochrane, K.[L]., Die, D., Hackett, A., Lárez, A., Maison, D., Marcano, .A., Phillips, T., Soomai, S., Souza, R., Wiggins, S., and Ijspol, M. 2001. Regional Assessment of the Brazil-Guianas groundfish fisheries. Regional reviews and national management reports. Forth workshop on the assessment and management of shrimp and groundfish fisheries on the Brazil-Guianas shelf, Cumaná, Venezuela, 2-13 October 2000. FAO Fisheries Report No. 651. pp22-34.
- Booth, A.J. 2000. Development of a multispecies-multigear per-recruit model that incorporates parameter variability. *In* Western Central Atlantic Fisheries Commission (WECAFC) Report of the third Workshop on the Assessment of Shrimp and Groundfish Fisheries on the Brazil-Guianas Shelf. *FAO Fisheries Report No.* 628. 241pp.
- Booth, A.J., Cochrane, K.L. and Hackett, A. 2000. The application of a multispecies multigear per-recruit model that incorporates parameter variability to the shrimp and groundfisheries of Guyana. *In* Western Central Atlantic Fisheries Commission (WECAFC) Report of the third Workshop on the Assessment of Shrimp and Groundfish Fisheries on the Brazil-Guianas Shelf. *FAO Fisheries Report No.* 628. pp 154-172.
- Hackett, A., Cochrane, K.L., and Booth, A.J. 2000. Selectivity, growth, mortality and stock assessment of bangamary *Macrodon ancylodon* and butterfish *Nebris microps* in Guyana. *In* Western Central Atlantic Fisheries Commission (WECAFC) Report of the third Workshop on the Assessment of Shrimp and Groundfish Fisheries on the Brazil-Guianas Shelf. *FAO Fisheries Report No. 628.* pp 110-123.
- Booth, A.J. and Hecht, T. 2000. Utilisation of South Africa's living marine resources. In: Summary Marine Biodiversity Status Report for South Africa. Durham, B.D. & Pauw, J.C. (eds). National Research Foundation, South Africa. pp 57-67.
- Booth, A.J. 2000. Dageraad (*Chrysoblephus cristiceps*). In South African Marine Linefish status reports. Mann, B.Q. (Ed). Special Publication Oceanographic Research Institute 7: 134-136.
- Booth, A.J. 2000. Red stumpnose (*Chrysoblephus gibbiceps*). In South African Marine Linefish status reports. Mann, B.Q. (Ed). Special Publication Oceanographic Research Institute 7: 137-138.

- Booth, A.J. 2000. Red roman (*Chrysoblephus laticeps*). In South African Marine Linefish status reports. Mann, B.Q. (Ed). Special Publication Oceanographic Research Institute 7: 139-141.
- Booth, A.J. 2000. Poenskop (*Cymatoceps nasutus*). In South African Marine Linefish status reports. Mann, B.Q. (Ed). Special Publication Oceanographic Research Institute 7: 145-146.
- Booth, A.J. 2000. Blue hottentot (*Pachymetopon aeneum*). In South African Marine Linefish status reports. Mann, B.Q. (Ed). Special Publication Oceanographic Research Institute 7: 160-161.
- Booth, A.J. 2000. Bronze bream (*Pachymetopon grande*). In South African Marine Linefish status reports. Mann, B.Q. (Ed). Special Publication Oceanographic Research Institute 7: 164-165
- Booth, A.J. 2000. Red steenbras (*Petrus rupestris*). In South African Marine Linefish status reports. Mann, B.Q. (Ed). Special Publication Oceanographic Research Institute 7: 168-169.
- Booth, A.J. 2000. Panga (*Pterogymnus laniarius*). *In* South African Marine Linefish status reports. Mann, B.Q. (Ed). *Special Publication Oceanographic Research Institute* **7:** 178-179.
- Booth, A.J. 2000. White musselcracker (*Sparodon durbanensis*). *In* South African Marine Linefish status reports. Mann, B.Q. (Ed). *Special Publication Oceanographic Research Institute* 7: 189-190.
- Booth, A.J. & Sauer, W.H.H. 1999. Steps towards the development of alternative stock assessment models for the linefish in South Africa. In *Proceedings of the third southern African marine linefish symposium*, *Arniston 28 April 1 May 1999*. B.Q. Mann (ed.). pp 121-125.
- Sauer, H.H., Wilke, C.G., Griffiths, M.H., Mann, B.Q., Booth, A.J. & Brouwer, S.L. 1999. The South African boat based linefishery the last bend at the end of the road? In *Proceedings of the third southern African marine linefish symposium, Arniston 28 April 1 May 1999.* B.Q. Mann (ed.). pp 112-115.
- Booth, A.J. 1998. An introduction to age-structured production modeling. Report on the FAO/DANIDA High-Level Course on Age-Based Fish Stock Assessment. GCP/INT/575/DEN pp. 19-47

Scientific reports and assessments

- Booth, A.J. 2008. Reducing uncertainty in Alaskan sablefish, *Anoplopoma fimbria*, recruitment. Report for NOAA/NMFS Ted Stevens Marine Research Institute, Alaska. 56pp.
- Booth, A.J. 2005. South African monkfish (*Lophius vomerinus*) stock assessment. WG/05/04/D:A:07. Marine and Coastal Management, South Africa. 18pp.
- Booth, A.J. Booth, A.J., Sauer, W.H.H. and Cohen, M. 1999. Algoa Bay Management Plan. December 1999. 74 pp.
- W.H.H. Sauer & Booth, A.J. 1998. Assessment of the impacts of the Coega harbour on fishing activities, estuaries and phytoplankton production in Algoa Bay. Unpublished Environmental Impact Assessment submitted to the Coega IDZ in January 1998. 92pp.

Popular articles

Booth, A.J. 1996. Panga - a new directed fishery? *SA Commercial Marine* December 1996 - February 1997. pp 6-7.

Book reviews

Booth, A.J. 2005. Book review of Marine Reserves: a guide to science, design and use. Jack Sobel and Craig Dahlgren (2004). African Journal of Aquatic Science 30 (2): 215-216.

APPENDIX B - THESES (CO-)SUPERVISED

PhD

Tsungai Zengeya – Invasive Nile tilapia *Oreochromis niloticus* (Linnaeus, 1758) in the

Limpopo River system, South Africa: conservation implications (2012) (University of Pretoria and co-supervised with Chris

Chimimba and Armanda Bastos)

Wilbert Kadye – Assessing the impacts of invasive non-native sharptooth catfish

Clarias gariepinus (2012)

Henning Winker – Post-impoundment population dynamics of non-native common

carp *Cyprinus carpio* in relation to two large native cyprinids in Lake Gariep, South Africa (2011) (co-supervised with Olaf Weyl)

Matt Dicken – Population dynamics of the raggedtooth shark (*Carcharias taurus*)

along the east coast of South Africa (2006) (co-supervised with

Malcolm Smale)

Warren Potts – Towards the development of species-specific production models

for small-water bodies in southern Africa (2004) (co-supervised

with Tom Hecht)

Justus Rutaisire – Reproductive biology and artificial breeding of *Labeo victorianus*

in Lake Victoria, Uganda (2003)

Lima Maartens – An assessment of the monkfish resource off Namibia (2000)

(co-supervised with Tom Hecht)

MSc

Matthew Parkinson – Contributions of inshore and offshore sources of primary production

to the foodweb, and the trophic connectivity between various habitats along a depth-gradient, in Sodwana Bay, KwaZulu-Natal, South Africa, with distinction (2013) (co-supervised with Sven

Kaehler)

Denham Parker – On the biology and life history of largespot pompano *Trachinotus*

botla in Sodwana Bay (2012)

Rose Thornycroft – Videographic analysis of coelacanths and their habitat in Sodwana

Bay, with distinction (2012)

Reece Wartenberg – On the underwater video census of Western Indian Ocean coral reef

fishes (2012)

Graham Traas –	The conservation and management of freshwater fishes in the		
	Greater Addo Elephant national Park (co-supervised with Olaf		
	Weyl) (2009)		
Amanda Northrop –	Importance of various data sources in deterministic stock		
	assessment models (2008) (Co-supervised with Sarah Radloff)		
Charlene Da Silva –	The status and prognosis of the smoothhound shark (Mustelus		
	mustelus) fishery in the southeastern and southwestern Cape		
	coasts, South Africa (2008) (co-supervised with Malcolm Smale)		
James Lukey –	Population dynamics in the Grant's Valley estuary, Eastern Cape		
	(2006) (co-supervised with William Froneman)		
Nokuthula Khumalo - The fisheries potential of Marcusensis pongolensis, Oreochroma			
	mossambicus and Schilbe intermedius in Mnjoli Dam, Swaziland		
	(2006)		
Amber Childs –	Movement patterns of spotted grunter Pomadasys commersonnii		
	(Haemulidae), in a highly turbid South African Estuary, with		
	distinction (2006).S ₂ A ₃ Bronze Medal ⁵ . (co-supervised with Paul		
	Cowley)		
Geoffrey Kanyerere -	- Age, growth and yield-per-recruit of <i>Diplotaxodon limnothrissa</i> in		
	the south-east arm of Lake Malawi, with distinction (2003) (co-		
	supervised with Olaf Weyl)		
Len Olyott –	An investigation into aspects of chokka squid <i>Loligo vulgaris</i>		
	reynaudii biology on the south east coast of South Africa, with		
	distinction (2002) (co-supervised withWarwick Sauer)		
Mark Sampson –	Modelling the distribution and abundance of several demersal fish		
	species on the Agulhas Bank, South Africa (2002)		
Tracey Fairweather –	An analysis of the trawl and longline fisheries for <i>Merluccius</i>		
	capensis off the west coast of South Africa, with distinction		
T 0	(2001). S ₂ A ₃ Bronze Medal (co-supervised with Warwick Sauer)		
Lucy Scott –	The development of a Geographic Informations Systems based		
	atlas of southern African freshwater fish, and its application to		
	biogeographic analysis, with distinction (2000). (co-supervised		
	with Paul Skelton)		

Current

PhD

Matthew Parkinson – Movement dynamics of West Coast dusky kob *Argyrosomus* coronus (co-supervised with Warren Potts and Amber Childs)

The South African Association for the Advancement of Science (S_2A_3) awards a medal annually to the best MSc thesis from each of six South African Universities.