



SOUTHERN  
AFRICAN  
SOCIETY OF  
AQUATIC  
SCIENTISTS

PROGRAMME

# SASAQS 2014 CONFERENCE | 22-26 JUNE 2014

SUNDAY 22 JUNE 2014		
16:00	Registration	
18:00	Welcoming function & dinner	
MONDAY 23 JUNE 2014		
07:00	Registration	
Session 1	Aquatic Ecology & Management	
08:00	Welcoming	
08:15	<b>KEYNOTE: A Tale of Six Kalahari Rivers</b>	<b>John Mendelsohn</b>
08:55	An Inventory of Fish from Tete, the Lower Zambezi, Mozambique. Taxonomic notes and New Records	Warren Aken
09:15	Historical Aerial Photographs trace the Urbanisation of the Moreleta Spruit Catchment of Roodeplaat Dam	Mike Silberbauer
09:35	Protecting Habitat Diversity in Estuaries	Janine Adams
09:55	Determining Resource Quality Objectives – Lessons Learnt from South Africa	C. Pringle
10:15	TEA	
Session 2	Using Transdisciplinary Research to Build a New Practice in South Africa Water Resource Management	
10:45	Towards a New Paradigm for Integrated Water Resource Management: An Integrated research Program	Tally Palmer
11:20	Local Government, Water Resource Management and Water Service Delivery	Matthew Weaver
11:40	Building a Co-operative Water Quality Management Process in the Crocodile River Catchment	Tally Palmer





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<b>12:00</b>	A Green Drop Support Process for Waste Water Treatment Works in Mbombela, Mpumalanga		V. Munnik
<b>12:20</b>	Co-operative Water Quality Participation by the Sugar Industry, Crocodile River Catchment		Asiphe Sahula
<b>12:40</b>	User friendly Water Quality-Quantity Modelling for Participatory Water Quality Management		Hugo Retief
<b>13:00</b>	<b>LUNCH</b>		
<b>Session 3</b>	<b>Aquatic Parasitology</b>	<b>Aquatic Ecology and management</b>	
<b>14:00</b>	The Crustacean Fish Parasite <i>Lernaea barnimiana</i> in the Eastern Cape of South Africa: Indigenous or Alien?	Kyle McHugh	Hartbeespoort Dam Integrated Biological Remediation Programme (HDRP) from Water Desert to Diversity (2008 to 2014): A Successful Test Case for Managing a Hypertrophic Sub-Tropical Impoundment by Applying Biological Principles to Support Aquatic Ecosystems
<b>14:20</b>	Introduced Protozoan Fish Parasites in Southern Africa	Linda Basson	An Ecological Assessment of Endorheic Pans in the Free State, North West and Mpumalanga Provinces
<b>14:40</b>	Peritrich Ectosymbiont of a Planktonic Calanoid Copepod	Deidre West	Real-Time, Remote Fish Behaviour and Water Physico-Chemical Variable Monitoring to Evaluate the Biological Consequences of Habitat, Flow and Water Quality Changes in Rivers
<b>15:00</b>	The Health Status of <i>Oreochromis mossambicus</i> and <i>Tilapia rendalli</i> in a Conservation Area of the Phongolo River, South Africa	Jurgen de Swardt	Hartbeespoort Dam Integrated Biological Remediation Programme (HDRP) from Water Desert to Diversity (2008 to 2014): Nutrient Distribution a Key to Unlock Understanding of a Sub-Tropical Impoundment in Applying Biological Principles to Support Aquatic Ecosystems
<b>15:20</b>	Experimental Infection Models and Diagnosis of Epizootic Ulcerative Syndrome in Three-Spot Gourami ( <i>Trichogaster trichopterus</i> ) and Rainbow trout ( <i>Oncorhynchus mykiss</i> )	C. Fry	The Compliance/Incompliance of the Kruger National Park Rivers to the Set Macroinvertebrate TPCS from 2010 to 2013
<b>15:40</b>	<b>TEA</b>		



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<b>Session 4</b>			
<b>16:10-17:30</b>	Round Table: Alien Invasions	Chair: Jo van As	
<b>19:00</b>	<b>DINNER</b>		
<b>TUESDAY 24 JUNE 2014</b>			
<b>07:00</b>	<b>Registration</b>		
<b>Session 5</b>		<b>Inland Fisheries, Aquaculture and Fish health</b>	<b>Pollution &amp; Ecotoxicology</b>
<b>08:00</b>	Present Status and Future Management of Black Bass ( <i>Micropterus</i> spp.) in South Africa	Olaf Weyl	Ecosystem Health and DNA Damage in Human Liver Cancer Cells (HEPG2): A Comparative Approach to Investigating the Impacts from Acid Mine Drainage in the Western Basin, South Africa M. Steyn
<b>08:20</b>	The Phylogeny of Southern African Labeos	M. Ramoejane	Effects of Nutrient (N15P15K15 and UREA) Amendment on the Phytoremediation of Petroleum-polluted Aquatic Environment by Water Hyacinth ( <i>Eichhornia crassipes</i> [MART.] SOLMS) Prince Ndimele
<b>08:40</b>	Fish, Now with Added Essential and Toxic Elements	Sean Marr	Detecting Endocrine Disrupting Effects in Abiotic Matrices of the Phongola Floodplain Rialet Pieters
<b>09:00</b>	Species Composition and Relative Abundance of Fishes in Four Dams and a Natural Lake in the Western Cape	B.N. Dredge	The Ga-Selati Oil Spill: A Threat to the Aquatic and Terrestrial Biodiversity Kris Bal
<b>09:20</b>	Use of Larval Ageing to Determine the Spawning Period of Two Cyprinid Fish Species in the Senqu River System, Lesotho	Joppie Schrijvershof	From Drakensberg Tarns to Lowland Rivers? Aquatic Ecosystem Sensitivity to Atmospheric Deposition of Sulphur and Nitrogen Compounds Chris Curtis
<b>09:40</b>	Aquaculture and Inland Fisheries: A Free State Perspective	Leon Barkhuizen	Time Lags, Multiple Sources, Mixing and More: The Complications of Conducting Long-Term Research on Rivers Thabo Mohlala
<b>10:00</b>	The Concern for Human Health Effects in Communities after Consumption of Fish Harvested From the Albasini Dam in the Luvuvhu River Catchment	I.E.J. Barnhoorn	The Physico-Chemistry and Heavy Metal Content of Tissue and Gill of Fish ( <i>Oreochromis niloticus</i> , Linnaeus, 1958) from Water Body Receiving Industrial Effluent in Lagos, Nigeria Emmy Ndimele



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<b>10:20</b>	DDD's Fish Parasite Diversity of the Dams in the Free State	Pieter Swanepoel	DDD's Metal Contamination of Sediments and Fish from the Vaal River, South Africa	Wihan Pheiffer
	Should we be concerned? Parasites on Fish from Flag Boshielo Dam, Olifants River, Limpopo Province	Millicent Kekana	Detection of Oestrogen Active and/or Inhibitive Compounds in the Phongola Flood Plain Using the MVLN Reporter Gene Assay	Simone Prinsloo
	Monitoring of the Mlotane Estuary and the Analysis of the Preliminary Water Quality Results	J. Nolusindiso		
<b>10:30</b>	<b>TEA</b>			
<b>Session 6</b>	<b>Using Transdisciplinary Research to Build a New Practice in South Africa Water Resource Management</b>			
<b>11:00</b>	Evaluating the Decision to Build the De Hoop Dam in the Steelpoort River Catchment			Ian Preston
<b>11:20</b>	Towards a New Paradigm in Eutrophication Management			Carin van Ginkel
<b>11:40</b>	Ways to Increase the Recovery of Municipal Charges in Areas of High Poverty in a Socially Responsible Manner: The Case of the Sundays River Municipality			Lisa Maholo
<b>12:00</b>	The Mining Water Quality Activity System in the Upper Olifants River Catchment			Gareth Thompson
<b>12:20</b>	Catalysing Support Towards a New Paradigm Process			K. Rogers
<b>12:40</b>	Access to Land, Water and Ecosystem Services: Identifying Sources of Innovation Which Increase Human Well-Being			Karabo Chadzingwa
<b>13:00</b>	<b>LUNCH</b>			
<b>Session 7</b>	<b>Aquatic Ecology &amp; Management (Freshwater)</b>		<b>Aquatic Ecology &amp; Management (Estuaries)</b>	
<b>14:00</b>	Rehabilitation and Management of River and Wetland Systems in Cape Town – 4 Success Stories	Candice Haskins	Amphipod Estuarine Sediment Toxicity Testing with Cu and Zn: an Overview from the Past 10 Years	R. Mofokeng
<b>14:20</b>	Temporal Changes of Fynbos Riparian Vegetation Communities on Selected Upland Rivers in the Western Cape, South Africa	Mia Otto	Pristine to Degraded- The Use of Macrophyte Habitats to Determine the Health and Importance of KwaZulu Natal's Estuaries	Meredith Cowie
<b>14:40</b>	Community and Food Web Structure in the Keiskamma River System, Eastern Cape, South Africa	T.A. Bellingan	The Impact of Disturbance on the Salt Marsh – Terrestrial Ecotone	Dimitri Veldkornet



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<b>15:00</b>	Aquatic Macroinvertebrate Community in the Wilge River	K.T. Farrell	Mgobezeleni Estuary: a Small, but Important, Groundwater Dependent Black Water System in Northern KwaZulu Natal	G. Bate
<b>15:20</b>	<p>DDD's A Semi-Quantitative Survey of Macro-Invertebrates at Selected Sites to Evaluate the Ecosystem Health of the Olifants River</p> <p>Preliminary Assessment of the Water and Sediment Quality of the Olifants River, Limpopo Province, South Africa</p> <p>Resource Quality Objectives for the Olifants Catchment: Balancing Water Resource Use and Protection</p> <p>Resource Quality Objectives for the Upper and Lower Vaal Catchments: Balancing Water Resource Use and Protection</p> <p>Spatial and Temporal Variations of Selected Abiotic Factors and Metals in the Water and Sediment of Crocodile (West) River, South Africa: A Baseline Study</p> <p>Analysis of Active Rotenone Concentration During Treatment of the Rondegat River, Cape Floristic Region, South Africa: Evaluation of the Minimum Effective Dose (MED)</p>	<p>Hilde Kemp</p> <p>Antoinette Jooste</p> <p>Charles Dickens</p> <p>Charles Dickens</p> <p>J.L. Zaayman</p> <p>M.S. Jordaan</p>	A Numerical Prioritisation Model for the Selection of Estuaries for the National Estuarine Monitoring Programme in South Africa	Gerhard Cilliers
<b>15:40</b>	<b>TEA</b>			
<b>Session 8</b>				
<b>16:10-17:30</b>	Round Table: Inland Fishery Bio-assessment			Chair: Gordon O'Brien
<b>18:00</b>	<b>Blue Movie</b>			
<b>19:00</b>	<b>DINNER</b>			



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## WEDNESDAY 25 JUNE 2014

<b>07:30</b>	<b>Registration</b>		
<b>Session 9</b>	<b>Hydrology + Water Availability, Quality and Management</b>		
<b>08:00</b>	<b>KEYNOTE: Shale Gas Development and the Environment of the Karoo – Can the Two be Compatible?</b>		Danie Vermeulen
<b>08:40</b>	The Hidden Hydrology of Groenvlei		R. Parsons
<b>09:00</b>	The Mgobezeleni Catchment Study – an Integrated Hydrology-Ecology Study in The Mozambican Coastal Plain		R. Taylor
<b>09:20</b>	PROBFLO: The Formal Integration of the Ecological Risk Assessment Techniques Incorporating Bayesian Network Modelling within the Ecological Limits of Hydrological Alteration Framework to Determine Ecological Flow Standards for Riverine Ecosystems		Gordon O'Brien
<b>09:40</b>	Assessing the Impact of Land-based Activities on Water Resources: The Automated Land-Based Activity Risk Assessment Method (ALARM)		L. Quayle
<b>10:00</b>	The Usefulness of Bioaccumulation as a Pollutant Monitoring Tool: The Kruger National Park Experience		Victor Wepener
<b>10:20</b>	<b>TEA</b>		
<b>Session 10</b>	<b>Aquatic Alien Invasions</b>	<b>Bio-indicators</b>	
<b>10:50</b>	Existing and Emerging High Impact Invasive Species are Characterised by Higher Functional Responses Than Natives	Mhairi Alexander	The Impact of Environmental Stressors on Biomarkers in <i>Clarias gariepinus</i> and <i>Oreochromis mossambicus</i> in Ndumo Game Reserve
<b>11:10</b>	The Management of Aquatic Weeds in the North West and Gauteng Provinces.	Ilome Lessing	Biomarkers of Pollution in <i>Synodontis zambesensis</i> and <i>Hydrocynus vittatus</i> in the Lower Pongola River and Floodplain
<b>11:30</b>	Using Multiple Lines of Evidence to Understand the Vulnerability of Headwater Stream Fishes to Non-Native Predatory Fish Impacts	Bruce Ellender	The Application of a Macro-Invertebrate Trait Database as Bioindicator for Salinity and Pesticides in South Africa
<b>11:50</b>	Economic Impact of Smallmouth Bass Sport Fishing Provides Invasive Species Management Insight	Olaf Weyl	The Response of In-Stream Biota to a Major Flood Event and Anthropogenic Land Use Changes in the Luvuvhu River Catchment, South Africa
<b>12:10</b>	Do Invasive Trout Alter Aquatic Energy Flux to Riparian Consumers?	Michelle Jackson	Use of Fish Swimming Performance and Oxygen Usage as Biomarker of Effect: Exposure to Nanogold as Case Study



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12:30	The Lower Sundays River System: A Natural Laboratory for Investigating the Ecology of Fish Invasions	Darragh Woodford	Biomarkers of Pollution in Tilapia rendalli from the Nyamithi Pan, Phongolo River and Lake Jozini: A Comparative Study	Gregg Jansen van Rensburg
12:50	DDD's What are the Impacts of Riparian Tree Invasions on Stream Food Web Structure and Ecosystem Processes? Assessing the Biology of the River Goby as a Proxy to Understand Global Goby Invasions	Ina Fourie  L. Mofu	DDD's Bioaccumulation of Metals in Two Edible Species of the Nyl River System A Baseline Study of metal Contamination Along the Namibian Coastline for Perna perna and Choromytilus meridionalis	Ryo Musa  Simone Dahms
13:00	<b>LUNCH</b>			
<b>Session 11 Aquatic Ecology &amp; Management</b>				
14:00	<b>KEYNOTE: Aquatic Science in South Africa: Past and Future Challenges</b>			<b>P. Ashton</b>
14:40	A Refined Method for Determining Appropriate Buffer Zones for Wetlands, Rivers, and Estuaries			Ian Bredin
15:00	Ecological Integrity Assessment of the Lower Phongolo River and Floodplain			Wynand Vlok
15:20	Scale and Environmental Influences on the Distribution and Structure of Temporary Wetlands in Nelson Mandela Bay (NMB)			Brigitte Melly
15:40	<b>TEA</b>			
16:10-17:30	<b>AGM</b>			
19:00	<b>GALA DINNER</b>			
<b>THURSDAY 26 JUNE 2014</b>				
08:30-10:00	<b>Departure</b>			

## CONFERENCE SECRETARIAT



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