



## Invited Theme Speakers



### Morgan Trimble

Morgan Trimble is a PhD candidate at the Conservation Ecology Research Unit, University of Pretoria. Her PhD is supported by a United States National Science Foundation Graduate Research Fellowship.

She studied biology and physics at the Massachusetts Institute of Technology and completed her MSc in conservation ecology and planning at the University of Pretoria. She has broad interests in ecology and conservation biology, and her current research focuses on biodiversity in human-modified landscapes and the implications for people and for conservation.



### Daniel Marnewick

Daniel Marnewick has been working for BirdLife South Africa since 2006, and has been heading up the Important Bird and biodiversity Areas (IBA) and Regional Conservation Programmes since 2009. Daniel is responsible for the assessment and revision of South Africa's 122 IBAs, and for coordinating conservation action at priority IBAs. Before this, he was responsible for BirdLife South Africa's community based conservation work from 2006 to 2009.

Daniel has 15 years' experience in conservation, of which 13 years have been spent working in the conservation NGO sector. He has studied in the fields of nature conservation (under grad), environmental sociology (BA honours) and presently in wildlife management (MPhil). From 1998 – 2009, he has worked on various aspects of community based conservation, from community economic development, benefit sharing, transboundary parks, conservation training, environmental education, natural resource use and community owned tourism initiatives.

More recently Daniel has moved into the field of conservation planning specifically for avifauna. He manages a team of four regional conservation managers and one environmental education officer, who are responsible for conserving IBAs at regional and site levels. Much of this work is dependent on funding and the support of partners and citizen scientists, mostly from the birding community. The IBA regional managers use IBA assessments and ornithological research to assess the IBA network and ensure it meets relevant targets for conserving birds and associated habitats. A suite of tools are then used to conserve priority IBAs, such as Biodiversity Stewardship, provincial conservation planning, environmental

education and forming Local Conservation Groups to implement site specific conservation action. The ultimate aim of the IBA Programme is to increase the percentage of IBAs formally protected; to increase conservation action taking place at priority IBAs; to maintain or improve the state of the IBA trigger species and associated habitats; and finally to reduce the threats to IBAs.



## Marisa Coetzee

Dr Marisa Coetzee is currently employed by the Association for Water and Rural Development (AWARD) as Program manager and Biodiversity Coordinator for the USAID *Resiliency on the Limpopo River Basin program*, with the focus on the Olifants catchment. She is based at Hoedspruit, Limpopo Province (RSA), and prior to this held the position of Senior Manager of Scientific Services at the Mpumalanga Tourism and Parks Agency, RSA. She holds a Ph.D (Botany), M.Sc (Botany), B.Sc Hons (Zoology) and a B.Sc Agric (Nature Conservation, Zoology, Animal Physiology and Animal Husbandry).

Marisa Coetzee's primary interest is in social-ecological systems and governance frameworks, following integrated and systemic approaches towards transboundary biodiversity management, interlinked with improved livelihoods and resilient economic development. She has coordinated several multi-sectoral programs, and has a keen interest to investigate and demonstrate the use of bioregional institutional mechanisms to integrate biodiversity and ecosystem services, appropriate practices, and associated learning to attain sustainable development outcomes at transboundary level. Dr Coetzee and Dr Biggs also recently received the prestigious UNESCO Michel Batisse award for Biosphere management, for participatory work concerning the Kruger to Canyons Biosphere Reserve, the focus being on "Sharing the benefits of biodiversity through a regional action plan to nurture and sustain the contribution of biodiversity and ecosystem services to livelihoods and resilient economic development within the K2C BR".

Marisa Coetzee sees herself as building on a strong biophysical and management base, with a special interest in a trans-disciplinary approach in regional and catchment contexts, and particularly involving stakeholder empowerment. She enjoys creative team work looking for innovative practical solutions to multi-faceted bioregional challenges.



## Richard Fynn

Richard is currently Senior Research Scholar at the Okavango Research Institute (since 2009), working on rangeland ecology and herbivore ecology. His qualifications are: National Diploma in Nature Conservation, BSc (Botany and Grassland Science), BSc Hons. (Grassland Science), MSc. (Rangeland Ecology), PhD. (Plant Ecology).

During his Post Doc at UKZN (from 2003-2005), he was working on grassland ecology as influenced by fire, mowing, habitat productivity and soil fertility. He spent from 2005-2009 at Colorado State University working on grazing and fire effects on grasslands in Kruger National Park and at Konza Prairie Biological Station, Kansas.

His research interests are broad and related to plant-herbivore interactions, which can otherwise be referred to as grazing ecosystem ecology. He is particularly interested in the concepts of functional habitat heterogeneity and herbivore adaptive foraging strategies in relation to large spatial and temporal variation in resources in African savannah ecosystems and how these factors affect the productivity and stability of herbivore populations.

In turn, he is also very interested in the ecosystem engineering effects of large herbivore populations on ecosystem processes and functioning such as nutrient cycling, grassland composition, structure and productivity, forage quality and tree-grass interactions. Key questions in this regard are how does herbivore population size and herbivore movement (as influenced by functional habitat heterogeneity) modulate the ecosystem engineering effects of herbivore populations? In addition, how do different herbivore species perceive functional habitat heterogeneity and how do these perceptions influence species co-existence and facilitation and what are the implications for conservation management?

Finally, he is very keen to apply these adaptive foraging and ecosystem engineering concepts to livestock management and particularly to livestock-wildlife interactions and the problems of competition between livestock and wildlife. More specifically, how can pastoralists living around protected areas manage their livestock in a manner that increases livestock productivity and stability, reduces carnivore depredation of livestock and enhances functional habitat heterogeneity for wildlife? In other words – how can we create a win-win situation for pastoralists and wildlife in African savannas?



## Izak Smit

Izak Smit took a “mixed-bag” approach to subject matter and academic institutions alike, obtaining a PhD (Geography) from Cambridge University in 2007, after completing a MPhil (GIS & Remote Sensing) from the same university, an MSc (Environmental Protection and Management) from Edinburgh University and a BSc (Ecology and Mathematical Statistics) and BSc (Hons) (Environmental Analysis and Management) from the University of Pretoria, supplemented by selected BSc (Hons) (GIS) courses from Stellenbosch University.

In 2005 Izak took up employment with South African National Parks (SANParks) as Scientist, and since 2013 as Science Manager: Systems Ecology, GIS and Remote Sensing. As a scientist in a conservation agency, Izak is aware of the importance of relevant, practical and scientifically robust research for informing management of conservation areas.

As such he sometimes describes his job as a “translator” – translating management concerns into research frameworks and questions, and translating research results into management implications and actions. Izak is particularly interested in studying large-scale spatio-temporal ecological patterns and the underlying causes and effects thereof, and whether the drivers of these patterns are natural or management induced.

Based on his work in national parks, Izak has authored and co-authored 24 papers in peer-reviewed journals and book chapters, and regularly reviews manuscripts for journals across a range of subjects.