

**Joint SANBI Biodiversity Information Management &
Foundational Biodiversity Information Programme Forum**

13-16 August 2018

Cape St Francis Resort, Cape St Francis

Draft Programme

Monday, 13th August 2018
Cape St Francis Resort, Eastern Cape

Day One

Objectives:

Official welcome and national context for Foundational Biodiversity Information generation and management

Time	Session Title	Presenter
12.00 -13.00	Registration – arrival coffee/tea	
13.00-14.00	Lunch	
Facilitator:		
14.00-14.20	Official Welcome and Introduction by SANBI	Ms Carmel Mbizvo
14.20-14.40	Department of Environmental Affairs	To be confirmed
14.40-15.00	Opening Address by the Department of Science and Technology	To be confirmed
15:00-15:20	Address by the National Research Foundation	To be confirmed
15.20-16.00	Tea & Group Photo	
Facilitator:		
16.00-17.30	<p>Biodiversity and global change: National programmes for biodiversity assessment and monitoring</p> <ul style="list-style-type: none"> • The National Biodiversity Assessment: preliminary assessment of data gaps and challenges • Assessing and monitoring genetic diversity • Monitoring and assessing populations for decision-making • SAEON's projects on monitoring of biodiversity and global change <p>Questions and discussion</p>	<p>Presentations</p> <p>Deshni Pillay / Andrew Skowno</p> <p>Krystal Tolley</p> <p>To be confirmed</p> <p>To be confirmed</p>
17.30-18.30	Poster and networking session	
From 19:00	Postgraduate Student Ice-breaker function	

Tuesday, 14th August 2018
Cape St Francis Resort, Eastern Cape

Day Two

Objectives:

Explore various methods and approaches for generating the foundational biodiversity information required for biodiversity assessment and monitoring

Time	Session Title	Presenter
Facilitator:		
8.30-10.00	Camera trapping for assessment and monitoring populations <ul style="list-style-type: none"> • Use of camera trap data for decision-making • Invited speaker • Other presentations on camera trapping Questions and Discussion	<ul style="list-style-type: none"> • To be confirmed • To be confirmed • To be confirmed
10:00-10:30	Tea/Coffee	
Facilitator: tbc		
10.30-11.30	Invited speaker: The International Barcode of Life: second phase and metabarcoding projects for biosurveillance Presentations on DNA Barcoding: <ul style="list-style-type: none"> • Bugging Around: An Overview of the Kruger Park Malaise Program. (Speed presentation) • DNA barcoding of the dragonflies and damselflies (Order: Odonata) of the Golden Gate Highlands National Park in the eastern Free State South Africa. (Speed presentation) • DNA barcoding of KwaZulu-Natal Afromontane forest <i>Parmelia</i> (Parmeliaceae) species: A molecular approach to accurate specimen identification. (Speed presentation) Questions and Discussion	<ul style="list-style-type: none"> • Dr Evgeny Zakharov, Associate Director, Genomics, Center for Biodiversity genomics, University of Guelph, Canada • Ryan Rattray • Teboho Mofokeng • Nqobile Ndhlovu
11.30-13.10	Biodiversity Surveys in South Africa: addressing critical data gaps <ul style="list-style-type: none"> • The Karoo BioGaps Project making big strides for the Karoo. • Five years onwards, filling the “Transkei gap”: an updated checklist of the herpetofauna found in the Eastern Cape forest and adjacent grasslands. 	<ul style="list-style-type: none"> • Silvia Kirkman • Werner Conradie

	<ul style="list-style-type: none"> • Soil <i>Fusarium</i> survey in grassland. <p>Approaches to data generation for monitoring and assessment of biodiversity (session 1)</p> <ul style="list-style-type: none"> • Developing a long-term biodiversity monitoring framework for the eThekweni Municipality. • A foundational biodiversity map of the terrestrial microbiome of a sub-Antarctic island. • Re-surveying the insectivorous bats of northern Kruger National Park, South Africa. (Speed presentation) • Assessments of road impacts on the conservation of wildlife biodiversity in the Kruger to Canyon Biosphere Reserve: Case study of (Skukuza) Kruger National Park South Africa. (Speed presentation) <p>Questions and Discussion</p>	<ul style="list-style-type: none"> • Riana Jacobs • Mathilde van Rooyen • Venkatachalan Siddarthan • Erin Brinkley • Talifhani Masshao
13.10-14.10	Lunch	
Facilitator:		
14.10-15.40	<p>Approaches to data generation for monitoring and assessment of biodiversity (session 2)</p> <ul style="list-style-type: none"> • The use of Collembola as bio-indicators. • Using Passive Integrated Transponders in the Endangered African penguin to monitor populations and movement. • The response of taxonomic and functional bird diversity to forest product harvesting in the Eastern Cape, South Africa. • Biodiversity of mycorrhizal fungi in South Africa – progress and challenges • Marine microbial community dynamics as a tool for measuring the response of sub-Antarctic ecosystems to climate change. (Speed presentation) • Efficacy of point counts and mist-netting for species detection of forest-utilising birds in Eastern Cape forests. (Speed presentation) <p>Unravelling cryptic diversity</p> <ul style="list-style-type: none"> • Phylogenetic relationship in the slug-eater snakes, <i>Duberria</i> (Lamprophiidae). • Molecular data reveals potential cryptic lineages in two forest dwelling reptile species along the east coast of South Africa. (Speed presentation) <p>Questions and Discussion</p>	<ul style="list-style-type: none"> • Charlene Janion Scheepers • Katta Ludynia • Jessica Leaver • Joanna Dames • Nasipi Mtsi • Jake Mulvaney • Shelley Edwards • Theo Busshau

15.40-16.10	Tea/Coffee	
Facilitator:		
16.10-17.15	<p>Speed presentations: documenting genetic diversity:</p> <ul style="list-style-type: none"> • Genetic structuring in <i>Psammophylax</i> (Fitzinger 1843), a widespread African snake genus. • Genetic diversity of the forest dwelling <i>Myosorex cafer</i> and the generalist <i>Rhabdomys dilectus</i> in Eastern Cape. • Towards a molecular characterisation of <i>O. engelmannii</i> lineages in Africa. • Comparison of genetic structure of two forest bats across Eastern Cape Forests • Phylogeny of the terrestrial snail genus <i>Gittenouardia</i> (Mollusca: Gastropoda: Cerastidae). <p>Speed presentations: DNA barcoding:</p> <ul style="list-style-type: none"> • DNA barcoding of South African red seaweed species. • DNA barcoding of native and non-native succulent plants in the South African horticultural industry. • Barcoding of parasitoid wasps (Braconidae and Chalcidoidea) associated with wild and cultivated olives in the Western Cape of South Africa. <p>Questions and discussion</p>	<p>Speed Presentations</p> <ul style="list-style-type: none"> • Chad Keates • Emmanuel Matambo • S.E. Mbonani • Monika Moir • Evelyn Raphalo • Jamie Julies • Future Machate • Chante Powell
17.15-19:00	POSTGRADUATE STUDENT FORUM	
Facilitator: Leigh Richards		
<p>Postgraduate Student Forum programme activities will include:</p> <ul style="list-style-type: none"> • Career development for taxonomists (typical skills that are necessary to build a career in taxonomy): Dr Tshifhiwa Mandiwana • Science Communication workshop: The workshop will cover the behind the scenes of different media platforms and how they take science and turn into content that everyone wants to read or watch: Fortunate Phaka & Thula Cube • FBIP Postgraduate Student Association meeting 		

Wednesday, 15th August 2018
Cape St Francis Resort, Eastern Cape

Day Three

Parallel Sessions:

- **Presentations:**
Objectives: Updates on the FBIP activities; Information Systems and Architecture; Data management and data standards; Using foundational biodiversity data to address issues of global change; and Unravelling microbial diversity.
- **Camera Trap Workshop: (Facilitator – Rob Slotow)**
Objective: An open workshop for researchers and students who are generating camera trap data, data managers and data users to develop a national strategy for managing camera trap data will be run in parallel to the presentations.

Parallel session: Workshop (8:30 – 16:00)

Time	Session Title	Presenter
8.30-10.30	Camera trap data management workshop <ul style="list-style-type: none"> • Camera trap data management workshop: presentations on different systems for camera trap data management • Principles for a national camera trap data management system • Development of plan for establishing a camera trap data management system 	Discussion
10.30-16.00		

Parallel session: Presentations (8:30 – 17:30)

Time	Session Title	Presenter
Facilitator: tbc		
8.30-9.15	Update on FBIP grants and calls; data submitted and communication strategy <ul style="list-style-type: none"> • Overview of the FBIP funding approach and grants awarded • FBIP generated data: an assessment of taxonomic and spatial spread • The FBIP Communication strategy Questions and discussion	Presenters <ul style="list-style-type: none"> • Lita Pauw • Mahlatse Kgatla • Dane MacDonald
9.15-10.45	Biodiversity information management: systems and standards <ul style="list-style-type: none"> • The National Biodiversity Information System (NBIS) update • Developing collection data management service as part of the NBIS • The SAIAB Biodiversity Data Curation Platform • A review of global data sharing trends and the case for open data 	Presenters <ul style="list-style-type: none"> • Brenda Daly • Brenda Daly • Willem Coetzer • Ian Engelbrecht

	<ul style="list-style-type: none"> • Specimen data challenges: the need to address quality standards • SANBI coordinating the development of policies for managing foundational animal work in South Africa <p>Questions and discussion</p>	<ul style="list-style-type: none"> • Mahlatse Kgatla • Rethabile Motloug
10.45-11.15	Tea/Coffee Break	
Facilitator: tbc		
11.15-13.00	<p>Collection specimen data management</p> <ul style="list-style-type: none"> • Development of a sustainable solution for biodiversity data management and curation: Case study of a 10-year academic collection at the African Centre for DNA Barcoding. • Challenges and progress with mobilising biodiversity data in the Iziko South African Museum entomology collection. • Conversion of East London Museum Malacology database to Specify6. (Speed presentation) <p>What's in a name?</p> <ul style="list-style-type: none"> • Using taxon concepts to reconcile the meanings of names in a collection context. • The inconsistent application of common and species names to polychaete worms used as bait can affect management. • Indigenous Names for South African Frogs and Aspects of Folk Taxonomy, A Zululand Case Study. (Speed presentation) <p>Human capital development for Foundational Biodiversity Information</p> <ul style="list-style-type: none"> • The CREW Programme building capacity in response to Target 15 of the National Plant Conservation Strategy. <p>Questions and discussion</p>	<p>Presentations</p> <ul style="list-style-type: none"> • Ronny Kabongo • Simon Van Noort • Mary Cole • Ian Engelbrecht • Carol Simon • Fortunate Phaka • Suvarna Parbhoo-Mohan
13.00-14.00	Lunch	
Parallel sessions	Facilitator – tba	Facilitator - tba
14.00-15.00	<p>Unravelling microbial diversity</p> <ul style="list-style-type: none"> • Screening of ectomycorrhizal and other associated fungi in South African forestry nurseries. Veronique Chartier FitzGerald • Root fungal diversity associated with three <i>Disa</i> species. (Speed presentation) Nondumiso Khambule 	<p>Using foundational biodiversity information for addressing global change challenges</p> <ul style="list-style-type: none"> • Biodiversity and impacts of plant feeding mites on tea plant (<i>Camellia sinensis</i>) in South Africa. Pholoshi Maake

	<ul style="list-style-type: none"> • Marion Island vegetation and root associated fungal diversity. (Speed presentation) Jahman Thabede • Diversity of rhizobia associated with root nodulation in pigeonpea (<i>Cajanus cajan</i>) from South Africa. (Speed presentation) Francina Bopape • A plethora of <i>Fusarium</i> species in grassland biome soils. (Speed presentation) Mudzuli Mavhunga <p>Questions and discussion</p>	<ul style="list-style-type: none"> • The importance of herbaria distribution records in the study of gene flow likelihood from sugarcane (<i>Saccharum</i> hybrids) to wild and weedy relatives in eastern South Africa. (Speed presentation) Dennis Komape • The use of herbaria specimens for the identification of the alien and threatened plant species of the Sappi Ngodwana plantations. (Speed presentation) Refentse Phetla • Investigations into a new invasive worm in the Knysna Estuary. (Speed presentation) Hendre van Rensburg • Response of ant communities to woody plant expansion at Hluhluwe-iMfolozi Parks, KwaZulu-Natal. (Speed presentation) Nomathamsanqa Mkhize <p>Questions and discussion</p>
15.00-15.30 Tea/Coffee Break		
Facilitator – tba		
15.30-17.00	<p>Speed presentations: assessing biodiversity in different habitats</p> <ul style="list-style-type: none"> • Ant communities along an elevational transect, Udzungwa Mountain in Tanzania. • Investigating population demographics, breeding system and principle pollinator of <i>Protea curvata</i>. • The role of competition in structuring ant communities in selected grasslands and forest habitat. • Floristics of three Northern Coastal Forests in a global biodiversity hotspot: A comparison across patches of contrasting disturbance history. • Checklist of Epigaeic ants in Buffelsdraai Landfill Conservancy, South Africa. • Ant and spider community response to alien invasive plant species ((<i>Chromolaena odorata</i>). <p>Speed presentations: Taxonomy</p> <ul style="list-style-type: none"> • A taxonomic study of the planktonic freshwater free-living copepods in Turfloop Dam, Limpopo Province. • A taxonomic revision of the <i>Brevipalpus phoenicis</i> and <i>Brevipalpus obavatus</i> species complexes (Acari: Tenuipalpidae) in South Africa. <p>Questions and discussion</p>	<p>Speed Presentations</p> <ul style="list-style-type: none"> • Caroline Kunene • Precious Mabuza • Nokubonga Thabethe • Olivier Kambaj • Sbongiseni Xolo • Sinenhlahla Mntambo • Peral Mnisi • Risuna Ndzeru
17.00-17.15	Feedback from camera trap workshop	To be confirmed
17:15-17:30	Key outcomes, reflections, and closure	Jeff Manuel

Thursday, 16th August 2018
Cape St Francis Resort, Eastern Cape

Day Four

Objectives:

Training sessions and workshops (in parallel) to improve skills in biodiversity data management

Parallel Session:

Camera trap data management – using existing systems for storing and working with camera traps data. A large number of projects in South Africa are currently generating camera trap data. A national system for archiving and sharing the data generated from these projects will ensure that a national resource can be developed for future use in research and decision-making.

08h30-14h00

Parallel Session:

Barcode of Life Database – using BOLD for DNA barcode data analysis and identification of material. This workshop will be led by Dr Evgeny Zakharov of IBOL, and will illustrate some of the key functionalities of the Barcode of Life Database (BOLD).

08h30-14h00

Parallel Session:

SANBI-GBIF Georeferencing Training:
SANBI-GBIF will be hosting a Georeferencing training event, to build skills in improving data quality. New approaches in georeferencing skills will be presented.

08h30-14h00