



The
Conservation
SYMPOSIUM

KwaZulu-Natal, South Africa

Programme
OVERVIEW

5-9
NOV
2018

PRESENTATION VENUES

MEALS

QUERIES



CHAPEL

RHOLANDS HALL

SECRETARIAT OFFICE

DINING ROOM

RECEPTION

SMALL CONFERENCE ROOM

MARQUEE

BOMA

ST. IVES VENUE LAYOUT



Delegates who have attended previous symposia may be wondering about the changes to the name and logo for the Symposium.

The previous name, the Symposium of Contemporary Conservation Practice, while being descriptive of the content of the Symposium - a symposium dealing with the current (contemporary) issues and approaches (the practice) of conservation - was long and did not roll off the tongue easily. It also had two words in it that were frequently misspelt! This resulted in some identity issues. The Conservation Symposium is more to the point, with 'The' indicative of our objective of being the premier southern African gathering of conservation practitioners addressing current and emerging issues, sharing lessons and developing contemporary approaches.

Just as the name was a bit difficult, the old logo was found to be very busy and lacked impact. The new logo is crisp and instantly recognisable. Derived from the international symbol for connection, the earthy green and blue colours symbolize the holistic scope of the Symposium and emphasise the interconnectedness of terrestrial and aquatic environments. The blue circles may make you think of island biogeographic theory or the SLOSS debate, and the link between them may lead you to think about the importance of corridors in conservation biology.

While there have been changes in the branding of the Symposium, we have retained all that has made it such a success over the past six years. Through a process of reflection and analysis of delegate feedback, we have significantly improved several aspects of the administration, content and approach, including creating more opportunity for delegate involvement and discussions. So The Conservation Symposium is the same, only better, and we are confident that regular delegates will quickly adopt and support the changes.



PARTNERS

The Conservation Symposium is brought to you through a partnership between Ezemvelo KZN Wildlife (EKZNW), WILDTrust, University of KwaZulu-Natal (UKZN), Environmental Law Association (ELA), Endangered Wildlife Trust (EWT), University of Zululand, and our new partner Nature, Environment and Wildlife Filmmakers Guild (NEWF). The partnership with NEWF is designed to foster mutually beneficial links between filmmakers (who are looking for content) and conservationists or researchers (who need ways of telling their stories). During the Symposium NEWF members will be listening in to presentations and may approach you to discuss ways of telling your story, or you may approach them directly with ideas suitable for the film medium (TV, documentaries, features). Likewise, we have environmental journalists at the Symposium and you may, within the rules of your organisation’s media policies, where applicable, discuss media-worthy stories.



PROGRAMME

We’ve gone digital. In the interests of reducing impact on the environment The Conservation Symposium provides a printed summary of the programme with basic information on sessions (this document) but the full programme with abstracts and information on the presenters and other delegates is available on The Conservation Symposium app and website.

HAVE YOU DOWNLOADED THE CONSERVATION SYMPOSIUM APP? Go to either the Google Playstore or Apple App Store and download Dryfta. Scroll down to The Conservation Symposium and remember to login to gain full functionality. Use the same username and password as you have been using on the website . The app will work on all Android and Apple smart devices.



If you do not have a smart device or cannot install the app then you can see the detailed programme on the website www.conservationssymposium.com. You can also access the other functions that the app offers, including viewing speaker and delegate profiles, abstract text, your own schedule (which is customisable), your connections with other delegates, etc.

  **SOCIAL MEDIA** **#conservationssymposium**  

In an effort to contribute to public conversations around contemporary conservation we encourage delegates to share key discussions and findings that come from The Conservation Symposium on our social media platforms. Make sure to follow our Facebook page “The Conservation Symposium” and Twitter page “@theconservatio6” and make sure to use the hashtag **#conservationssymposium** so we can follow your posts.

WE CHALLENGE EVERY DELEGATE TO POST AT LEAST ONCE DURING THE WEEK!!

STEERING COMMITTEE

Mr Ian Rushworth (Chair), Ezemvelo KZN Wildlife

Mr Craig Mulqueeny, Ezemvelo KZN Wildlife

Mr Joe Phadima, Ezemvelo KZN Wildlife

Dr Andy Blackmore, Ezemvelo KZN Wildlife

Dr Roelie Kloppers, WildTrust

Ms Pragna Parsotam-Kok, NEWF

Mr Noel Kok, NEWF

Dr Michelle Tedder, University of KwaZulu-Natal

Dr Jeanne Tarrant, Endangered Wildlife Trust

Ms Melissa Lewis, Environmental Law Association

Dr Alpheus Zobolo, University of Zululand

Ms Freyni du Toit, Secretariat

Ezemvelo: For the many staff and interns who are involved before, during and after the Symposium, particularly those in the Conservation Services Division and the Design Studio, and for financial and in-kind support for delegate attendance.

WILDTrust provides funding for attendance of keynote speakers and students, and sponsors the Annual Premier's Award.



NEWF contributes towards the audio-visual arrangements and producing the YouTube videos, as well as sponsoring a new award, the NEWF Young Scientist Award.

SCIENTIFIC COMMITTEE

Mr Ian Rushworth (Chair), Ezemvelo KZN Wildlife

Mr Craig Mulqueeny, Ezemvelo KZN Wildlife

Dr Jeanne Tarrant, Endangered Wildlife Trust

Dr Jennifer Olbers, Ezemvelo KZN Wildlife

Dr Scotty Kyle, Independent

Dr Michelle Tedder, University of KwaZulu-Natal

Ms Simangele Sithole, Ezemvelo KZN Wildlife

Mr Joe Phadima, Ezemvelo KZN Wildlife

Ms Melissa Lewis, Environmental Law Association

Dr Andy Blackmore, Ezemvelo KZN Wildlife

Prof Antoinette Kotze, National Zoological Gardens, South African National Biodiversity Institute

Prof Yoshan Moodley, University of Venda

Prof Mike Bruford, Cardiff University

Dr Roelie Kloppers, WildTrust

Ms Heather Terrapon, South African National Biodiversity Institute

Mr Kevin McCann, Conservation Outcomes

Mr Greg Martindale, Conservation Outcomes

Mr Steve McKean, Conservation Outcomes

Dr David Ehlers Smith, University of KwaZulu-Natal

Ms Coral Birss, CapeNature

Dr Yvette Ehlers Smith, University of KwaZulu-Natal

Dr Jeanetta Selier, South African National Biodiversity Institute

Prof Kevin Kirkman, University of KwaZulu-Natal

Ms Lisa Guastella, Independent

Prof Rob Slotow, University of KwaZulu-Natal

Ms Natalie Hayward, CapeNature

Dr Boyd Escott, Ezemvelo KZN Wildlife

Dr Kevin Coldrey, Anchor Environmental

Ms Phindile Xulu, Ezemvelo KZN Wildlife



THANK YOU TO ALL INVOLVED!

All presentations and posters will be adjudicated by your peers, and awards for the best oral and poster presentations will be announced at the gala dinner on Thursday. You may be approached by the session chair to complete assessments of presentations in a session, and in the spirit of the peer review process please assist in completing the easy scoring sheet. The Premiers Award for best paper from a KZN-based student will also be awarded at the same event.

For more information please see the Awards tab on the Information Centre on the website and/or on the Awards tab under Content on the app.

LOADING PRESENTATIONS

Please assist in the smooth running of the Symposium by loading your presentation at least one full session before you are due to present. This will allow for testing to ensure that the layout and any animations/videos work - and can be fixed timeously if they don't!

Presentations should be handed in at the designated audio-visual laptop in the Secretariat office near the main reception.

For any audio-visual or presentation emergencies please contact Dr Boyd Escott (0733668008).

DIGITAL DEVICE ETIQUETTE

While we encourage the use of digital devices, and acknowledge that some access to emails and the internet during the day may be important, please:

- **Make sure your cell phones are on silent**
- **Do not answer calls during sessions**

In order to ensure fair usage and reasonable connectivity speed, please:

- **Connect only ONE of your devices to the free WiFi**
- **Turn off automatic software updates, Dropbox photo synchronization and any other application that uses a lot of data (this can be done during the evenings if necessary)**

Out of respect for speakers (and the person/organisation paying for your attendance and participation) please do not work on your devices during presentations.



IN CASE OF EMERGENCY

NAME	CONTACT NUMBER	RESPONSIBILITY
Stephen Richert	082 459 0279	Medical Director/Paramedic
Catherine Bloxham	076 812 6382	St. Ives Liaison
Freyne du Toit	083 256 7202	Symposium Secretariat
SAPS Howick	033 239 9320/10111	Law Enforcement Incidents
Hilton Life Hospital Casualty	033 329 5600	Private Emergency Department
Howick Private Hospital	033 330 2456	Private Emergency Department

The Symposium has an emergency medical plan which is available on request from the Secretariat office or St. Ives reception.

In brief, patients will be assessed by Stephen Richert (the paramedic) and a treatment begun. A decision will be taken on which transport or further treatment options are required. He will then make arrangements or clearly delegate this to a responsible person. Patients requiring transport to a medical facility will be transported by ambulance or private vehicle to a suitable facility. EMRS or private ambulance services will be used, depending on whether the patient has a medical aid/insurance or not. Injured staff are covered under Injury on Duty and should be transported to private healthcare facilities.

Delegates are reminded that they are responsible for their own personal medications such as those for flu and colds. Medications will not be dispensed and delegates/staff are encouraged not to do so without authority.

Stephen kindly requests that delegates or staff do not contact ambulance services prior to his assessment and treatment as this will duplicate effort and cause problems where he is already arranging services. He is fully linked to all emergency services in Pietermaritzburg and surrounds, and is completely assured of a rapid response to any emergencies.

Delegates are further requested to familiarise themselves with the emergency exits, which are clearly marked as such around and in the venue.





08h00 – 15h00 CLOSED MEETING – SMALL CONFERENCE ROOM
INAUGURAL MEETING OF THE AFRICAN CHAPTER OF THE IUCN SSC CONSERVATION GENETICS SPECIAL GROUP

14H00 - 15H00 SYMPOSIUM REGISTRATION OPENS WITH WELCOME TEA AND COFFEE

15H00 – 18H20 SESSION ONE – RHOLANDS HALL
OPENING PLENARY – THE FUTURE OF SUSTAINABLE USE CHAIR: OSCAR MTHIMKHULU, EZEMVELO

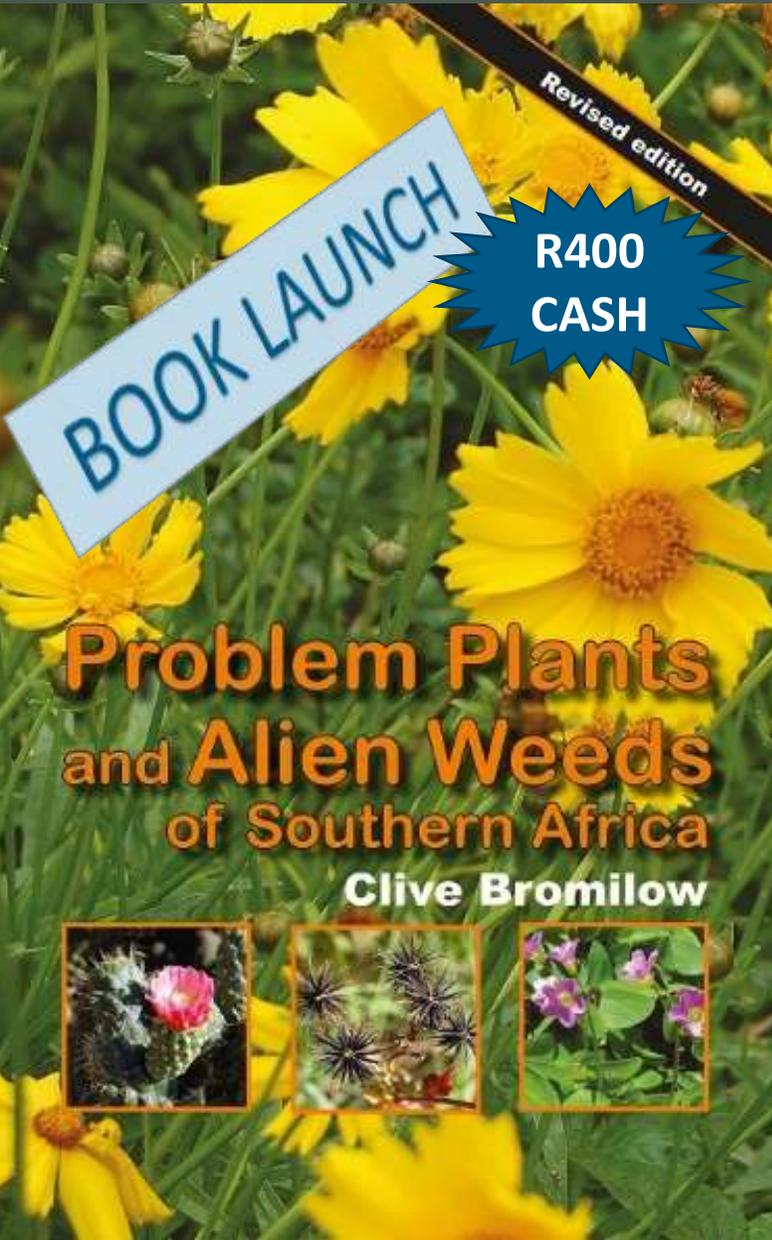
Welcome	Dr William Mngoma	Chairperson, KZN Nature Conservation Board
---------	-------------------	--

Southern Africa incorporates into its approach to conservation a sustainable use paradigm, and there are many excellent examples of how allowing people to benefit from the use of biodiversity has ultimately created incentives to maintain species and their habitat, contributing to conservation outcomes. The Biodiversity Economy Strategy recently launched by President Cyril Ramaphosa is premised on sustainable use. However, what exactly is encompassed by the concept of sustainable use? The current broad definition, combined with certain irresponsible practices, is providing opportunities for the entire concept of sustainable use to be confused and undermined. Increasingly there are polarised, dogmatic, emotional and antagonistic debates, essentially between utilisation and protectionism, ultimately at the expense of conservation. Many decisions, opinions and legal tools do not adequately consider those that ultimately will decide the fate of Africa’s wildlife – the local people that live with and depend on these resources.

In what promises to be a thought-provoking and lively session, there will be a number of presentations and a facilitated panel discussion with prominent leaders in the field in southern Africa and beyond, with a view to providing direction for the future of the sustainable use concept, so that it remains acceptable and continues to contribute to conservation.

The centenary investment – conservation dividends from sustainable use	Dr George Hughes	Independent
Recapturing conservation	Angus Middleton	Executive Director, Namibia Nature Foundation
Application of adaptive management to sustainable use of wildlife	Rowan Martin	Independent
Hunting for conservation profit	Lizanne Nel	SA Hunters and Game Conservation Association
The collateral legal consequences of using sport hunting as a tool for conservation	Prof Annecoos Wiersema	Sturm College of Law, University of Denver

18H30 - 21H00 MEET & GREET NETWORKING FUNCTION WITH BOOK LAUNCH & POSTERS



Southern Africa has possibly the most beautiful and diverse flora in the world, but this is now being seriously threatened by the alien, invasive species.

First published in 1995 with a revised edition in 2001, Problem Plants of South Africa became an indispensable guide to anyone interested in knowing how to recognise, understand and control troublesome plants. These first two editions were aimed primarily at agricultural weeds and helped farmers identify all those species on their herbicide labels. The driving factor that initiated the publication of the 3rd edition, called Problem Plants and Alien Weeds of South Africa, was the need to create more awareness of these weeds, the regulations involved and possible control measures. The 4th and latest edition of the book covers more weeds and encompasses a larger geographic area.

This book covers more than 500 species of problem plants in detail, with descriptive and interesting texts, which highlight the origins, environmental impacts and possible control measures for these weeds. There are over 700 colour photographs that can assist with identification, create more awareness and illustrate a plant's problematic nature.

Up-to-date distribution maps show the range of all these plants in southern Africa. Then there are icons that will show the existence of registered herbicides (in South Africa), the species classification in terms of government regulations (NEMBA), and presence of biological control.

Introductory chapters explain aspects of problematic indigenous vegetation including bush encroachment, veld degradation, control and management techniques, as well as the threat posed by ornamental garden plants.

About the Author:

Clive Bromilow holds a degree in Applied Biology with a major in Ecology. He has been involved in the agricultural chemical industry all over the world for over 40 years and this has led to a lifelong interest in plants and weeds. His books on weeds, particularly the 3rd edition, has been very successful and has become a reference book on the subject throughout southern Africa and indeed the world.



18H30 - 21H00 MEET & GREET NETWORKING FUNCTION WITH BOOK LAUNCH & POSTERS

POSTER PRESENTATIONS ON DISPLAY DAILY

The spatial and temporal variation of meiofauna assemblages in the Mlalazi estuary, KwaZulu-Natal	Abigail Rohde, UKZN
Conservation genetics of the elusive suni antelope	Monique Swanepoel, UP
Comparative assessment of the prawn community of eelgrass and mangrove habitat in the Mhlathuze estuary	Nelisiwe Manukuza, UniZul
Influential factors for success in implementation of the National Biodiversity Economy Strategy in the Eastern Cape Province, South Africa	Lwandiso Pamla, ECPTA
Diversity and composition of flightless arthropods in rocky and adjacent vegetation in the savanna	Inam Yekwayo, UMP
Does high density grazing homogenise mesic grassland in KwaZulu-Natal?	Michelle Tedder, UKZN
Aggregations of African black oystercatchers in remote coastal areas of the Northern Cape province of South Africa	Louise Geldenhuys, NCDENC
Management of alien and invasive plant species in the new Kwelera National Botanical Garden, Eastern Cape province	Charlie Maimela, SANBI
Conservation planning using genomic data for identifying areas that protect evolutionary resilience in the seagrass, <i>Zostera capensis</i>	Sophie van der Heyden, SUN
Is the common sugarbush (<i>Protea caffra</i> subsp. <i>caffra</i>) merely persisting or is recruitment occurring within the habitat of the Endangered Pennington's protea butterfly (<i>Capys penningtoni</i>)?	Sharon Louw, Ezemvelo
The potential impact of the alien invasive harlequin ladybird beetle, <i>Harmonia axyridis</i> , on the Endangered Pennington's protea butterfly, <i>Capys penningtoni</i>	Sethabile Mbatha, Ezemvelo
Long-term monitoring of Leopard (<i>Panthera pardus</i>) to determine their abundance, prey interaction and habitat use in the Baviaanskloof World Heritage Site, South Africa	Sandile Mdoko, ECPTA
A sociological and biological study of human-wildlife interactions within the urban edge of Johannesburg	Emily Taylor, EWT
Finding a balance between natural resource use and conservation in the ka-Homu villages, Limpopo province, South Africa	Nyiko Mutileni, UL
Guardians of the Grasslands - the success of the Gauteng Biodiversity Stewardship Programme	Emily Taylor, EWT
Using citizen science to monitor the impact of human-elephant conflicts and the effectiveness of mitigation measures	Antoinette van de Water, UKZN

07H30 - 08H30 SYMPOSIUM REGISTRATION FOR ONE DAY DELEGATES AND MONDAY LATE ARRIVALS



KEYNOTE SPEAKER: PROF MIKE BRUFORD, SUSTAINABLE PLACES RESEARCH INSTITUTE, CARDIFF UNIVERSITY

Mike Bruford is a molecular ecologist who studies demographic and evolutionary processes affecting populations, species and ecosystems of conservation concern. His group focuses on understanding the determinants of genomic diversity, population structure and fitness at a variety of spatio-temporal scales, placing emphasis on the provision of data and recommendations to management authorities for action and policy development. His group studies both wild and domestic species and uses methods from forensic DNA profiling through to whole genome sequencing, integrate these data with landscape and genealogical and stochastic population analysis. Much of his work is carried out in collaboration with applied conservation organisations and he is Director of the Frozen Ark, co-Chair of the IUCN Species Survival Commission’s Conservation Genetics Specialist Group and is the academic lead for the Welsh Government’s Biodiversity and Ecosystem Evidence and Research Needs program.

08H30 – 10H30 TUESDAY PLENARY **SESSION TWO – RHOLANDS HALL**
CHAIR: JOE PHADIMA, EZEMVELO

KEYNOTE ADDRESS: Mainstreaming genetics into conservation policy and practice in Africa	Prof Mike Bruford	Sustainable Places Research Institute, Cardiff University
Leopards (<i>Panthera pardus</i>) in the intergovernmental arena - wildlife treaties and the fate of the world’s most international big cat	Prof Arie Trouwborst	Department of European and International Public Law, Tilburg University
CITES: conservation tool or an emerging threat to biodiversity?	Michele Pfab	Biodiversity Research, Information and Monitoring, South African National Biodiversity Institute
Conceptual framework for translating natural capital context into conservation and planning and management: elephant in South Africa as a case study	Prof Rob Slotow	School of Life Sciences, University of KwaZulu-Natal

10H30 – 11H00 MORNING TEA



10H30 – 11H00 MORNING TEA

11H00 – 13H00

SESSION 3 – RHOLANDS HALL	
Special Session: Managing Elephant in Small to Medium-Sized Areas	
Chair: Rob Slotow, UKZN	
Implementing the Norms and Standards for the Management of Elephants – practical applications and lessons learnt	Brent Coverdale, Ezemvelo
Management of elephant in Ithala Game Reserve – an update on the “Is it time to cull?” question	Rickert vd Westhuizen, Ezemvelo
Vegetation changes in Hluhluwe-iMfolozi Park: the role of elephants	Siphesihle Mbongwa, Ezemvelo
Managing the vulnerability of vulture populations to elephant impacts	Ian Rushworth, Ezemvelo
Gigantic elephant instructions for tiny places	Sam Ferreira, SANParks
Managing elephants in a changing landscape	Jeanetta Selier, SANBI
<i>Facilitated discussion of Managing Elephant in Small to Medium-Sized Spaces</i>	Rob Slotow, UKZN

SESSION 4 - CHAPEL	
Special Session: Definition, Delineation and Protection of the Zone of Influence of Protected Areas	
Chair: Coral Birss, Cape Nature	
Setting the scene for evaluative management and measurement of conservation outcomes	Natalie Hayward, CapeNature
An applied approach to the delineation of the Zone of Influence, using Vernon Crookes Nature Reserve as a case study	Shannon Herd-Hoare, Ezemvelo
Mechanisms to facilitate spatial planning adjacent to protected areas towards ensuring ecological integrity	Aurelia Forsyth, CapeNature
Towards a defensible multi-criteria approach of delineating the zone of influence for protected areas in the Eastern Cape province, South Africa	Kagiso Mangwale, ECPTA
Let us not forget town planners when delineating Zones of Influence	Boyd Escott, Ezemvelo
<i>Facilitated discussion on Definition, Delineation and Protection of the Zone of Influence of Protected Areas</i>	Coral Birss, CapeNature

SESSION 5 – DINING ROOM	
Special Session: Conservation Genetics Comes of Age in Africa I	
Chair: Mike Bruford, Cardiff University	
Conserving adaptive potential: a multispecies cost-benefit analysis of different molecular markers	Erica Nielsen, SUN
How ready are we for integrating genetics into marine conservation and management? Reflections on progress and an exciting future	Sophie von der Heyden, SUN
Linking genetic diversity and conservation management of freshwater fish species in South Africa	Paulette Bloomer, UP
High throughput genotyping by sequencing data support newly identified cryptic lineages in a threatened family of small mammals	Samantha Mynhardt, UP
Identifying conservation units of common eland using genetic markers	Deon de Jager, UP
Molecules and conservation: molecular phylogenetics meets the baboon spider	Catherine Sole, UP
Progress on DNA barcoding of South Africa's linefish species	Thierry Hoareau, UP

13H00 – 14H00 LUNCH



13H00 – 14H00 LUNCH

14H00 – 15H30

SESSION 6 – RHOLANDS HALL		SESSION 7 - CHAPEL		SESSION 8 – DINING ROOM	
Understanding and Managing Ecological and Evolutionary Processes		Legal, Policy and Ethical Issues		Special Session: Conservation Genetics Comes of Age in Africa II	
Chair: Michelle Tedder, UKZN		Chair: Melissa Lewis, ELA/Tilburg University		Chair: Mike Bruford, Cardiff University	
Fynbos frogs, fire frequencies and multi-species thresholds for potential concern	Andrew Turner, CapeNature	Skype Presentation: Reintroduction as a tool for restoring species: a legal assessment	Floor Fleurke, Tilburg University	Conservation genetics: a tool to support wildlife crime investigations in southern Africa	Monica Mwale, NZG SANBI
Influence of burning and defoliation on <i>Festuca costata</i> in the Drakensberg	Kevin Kirkman, UKZN	A research gap analysis on priority CITES- and TOPS-listed animal and plant species	Tasneem Variawa, SANBI	The interface between conservancy and ranch-based wildlife populations: a molecular genetic approach	Shoni Zwane, ARC
The influence of fire on long-term composition resistance and diversity of Drakensberg grasslands	Paul Gordijn, SAEON	Is there still a place for single species conservation?	Elsabe van Schalkwyk, NCDENC	Contrasting evolutionary history, anthropogenic declines and genetic contact in the northern and southern white rhinoceros (<i>Ceratotherium simum</i>)	Isa-Rita Russo, Cardiff University
Lessons being learned about biodiversity in mesic grassland conservation corridors	Lize Joubert-van Der Merwe, SUN	A policy analysis of the Northern Cape Nature Conservation Act in relation to the medicinal plant Devil's claw (<i>Harpagophytum procumbens</i>)	Natalie Uys, NCDENC	Genetic population management of the black rhinoceros (<i>Diceros bicornis</i>)	Yoshan Moodley, UniVen
Long-term vegetation change in a plains habitat on the Goegap Nature Reserve, Succulent Karoo, South Africa	Conrad Geldenhuys, NCDENC	Biodiversity offsets and the unoffsetable: an uneasy conundrum	Andy Blackmore, Ezemvelo	Black rhino population management through genetics: case studies from the Black Rhino Range Expansion Project	Ursina Rusch, WWF-SA
<i>Facilitated discussion of Understanding and Managing Ecological and Evolutionary Processes</i>	Michelle Tedder, UKZN	A 'species scorecard': results from CITES CoP17, 2016	Ed Couzens, University of Sydney	<i>Facilitated discussion and summary of Conservation Genetics Comes of Age in Africa</i>	Mike Bruford, Cardiff University

15H30 – 16H00 AFTERNOON TEA



15H30 – 16H00 AFTERNOON TEA

16H00 – 17H30

SESSION 9 – RHOLANDS HALL

Advances in Monitoring and Surveillance

Chair: Craig Mulqueeny, Ezemvelo

Removing the fog from landscape monitoring using cloud-based technologies	Mark Thompson, GeoTerra
Trialling innovative technologies to study an elusive rabbit species in the Karoo	Esther Matthew, EWT
Vision systems for coast and mountain monitoring - case studies with whales, sharks, buoys and bearded vultures	Gavin Hough, EVS
BRUVS (baited remote underwater video surveillance)	Mondli Dlamini, Ezemvelo
Camera traps: standardized applications for an invaluable ecological research tool – the future and beyond	Yvette Ehlers Smith, UKZN
A multi-scale monitoring system for evaluating progress in SADC Transfrontier Conservation Areas: creation and piloting of an innovative model	Kevan Zunckel, SADC-TFCA

VENUE SET UP FOR NATURE, ENVIRONMENT AND WILDLIFE FILM EVENING

SESSION 10 - DINING ROOM

Land-Use and Conservation Planning

Chair: Andy Blackmore, Ezemvelo

The great coastal conservation conundrum	Simon Bundy, SDP EES
Exploring the influence of land management on occupancy and temporal activity of sympatric herbivores	Debbi Winterton, SANParks
Culture influences fine-scale patterns of land cover in former apartheid homelands, South Africa	Buster Mogonong, Wits
The use of heritage databases and indigenous knowledge in conservation planning in the Vhembe Biosphere Reserve, Limpopo province, South Africa	Tonderai Makoni, UniVen
Ethnobotanical knowledge and cultural practices of indigenous communities in Venda for sustaining plant and forest resources: Implications for biocultural heritage, conservation and restoration	Natasha Constant, UniVen

18H00 – 21H00 NATURE, ENVIRONMENT AND WILDLIFE FILM EVENING

18H00 – 21H00

CHAPEL

NATURE, ENVIRONMENT AND WILDLIFE FILM EVENING FEATURING *BECOMING VISIBLE*

Welcome and Introduction to Janet Solomon	Noel Kok	Nature, Environment & Wildlife Filmmakers Congress
Introduction to <i>Becoming Visible</i>	Janet Solomon	Vanishing Present Productions
Panel discussion facilitated by Noel Kok, and including Janet Solomon (Vanishing Present Productions), Dr Jennifer Olbers (Ezemvelo KZN Wildlife) and Dr Andrew Venter (WildTrust)		



When an animal is encountered stranded on a beach, it becomes an avatar, acting as a form of testimony, compelling you to engage with your own cognitive dissonance and your position of privilege in the human/animal binary. As avatars, they play a critical role by drawing to the surface, and infusing with emotional force, submerged stories of injustice. They become the public’s touchstone into the big blue and question indifference.

This multiple screen documentary began when Janet Solomon picked up her camera and drove to a beach to see the third humpback whale to strand on the KZN coastline in the first week of August 2016. The film focuses on an oil and gas seismic survey that took place off the KZN coastline, which was extended into the whale migration season that year. It advances the theme of nature as a political asset, and questions the scripts of consumptive economics embedded in South Africa’s governmental approaches to environmental policy.

Becoming Visible investigates the risks posed by unilateral, indiscriminate and traumatizing noise-exposure from marine seismic surveys to many marine species and the vulnerability of fishery-based livelihoods to these impacts.

Filmmaker Janet Solomon will speak about her journey and introduce the film, which will be followed by a panel discussion to clarify and unpack the issues raised in the film. Film tickets include popcorn served during the screening, two complimentary drinks, and burger bar following the panel discussion. A cash bar will be available.

07H30 - 08H30 SYMPOSIUM REGISTRATION FOR ONE DAY DELEGATES**KEYNOTE SPEAKER: DR MORNE DU PLESSIS, CHIEF EXECUTIVE OFFICER, WWF SOUTH AFRICA**

Morné du Plessis is the Chief Executive of WWF South Africa since September 2007. Among memberships of several Trusts and advisory boards, he is the Chair of the Academic Advisory Board of the Stellenbosch Institute of Advanced Studies (STIAS). Before joining WWF South Africa, Morné was the director of one of only six national Centres of Excellence in South Africa, at the Percy FitzPatrick Institute of the University of Cape Town. Before that he held research and management positions at the former Natal Parks Board and the University of California at Berkeley, respectively. Morné has presented keynote lectures and scientific presentations at a wide range of local and international conferences and authored or co-authored over 50 scientific publications in the fields of conservation biology and environmental science. He was awarded the South African National Research Foundation’s President’s Award in 1996. In 2000, he was listed among the Mail & Guardian’s “Most Promising 100 Young South Africans in the New Millennium”. Morné has degrees in Agriculture and Zoology from Stellenbosch and Pretoria universities, an Executive MBA from the Graduate School of Business (Cape Town), and a PhD in Zoology from the University of Cape Town.

08H30 – 10H30**SESSION ELEVEN – RHOLANDS HALL****WEDNESDAY PLENARY****CHAIR: ANDREW VENTER, WILDTRUST**

KEYNOTE ADDRESS: Is our conservation approach fit for purpose in the South Africa of tomorrow?	Dr Morne du Plessis	Chief Executive Office, WWF South Africa
Dead cow swimming: lessons from the next cetacean extinction for conservation in a globalised world	Prof Ed Couzens	Sydney Law School, University of Sydney
The aftermath of local rhino extinction: what ecosystem transformation should we expect?	Dr Liza le Roux	Claude Leon Postdoctoral Fellow, Nelson Mandela University

10H30 – 11H00 MORNING TEA AND MARINE PROTECTED AREA DECLARATION CELEBRATION



10H30 – 11H00 MORNING TEA

11H00 – 13H00

SESSION 12 – RHOLANDS HALL

Special Session: Exploring the Mechanisms Available to Ensure the Long-Term Viability and Resilience of Protected Area Expansion Efforts

Chair: Kevin McCann, Conservation Outcomes

Land Programme: sharing experiences in securing critical landscapes in South Africa	Jody Brown, WWF-SA
Towards investor readiness - support in the biodiversity economy sector to facilitate transformation and growth	Chris Galliers, CO
Can a Conservation Land Bank sustainably fund protected area expansion and management?	Kevin McCann, CO
BirdLife South Africa and Conservation Outcomes partnership to help conserve KwaZulu-Natal's threatened habitats and species	Steve McKean, CO
The regularisation of the open system of the Greater Kruger Area in terms of the Protected Areas Act	Gregory Martindale, CO
The uMngeni Ecological Infrastructure Partnership (UEIP) stakeholder analysis/mapping	Sifiso Maphumulo, SANBI
<i>Facilitated discussion</i>	Kevin McCann, CO

SESSION 13 - CHAPEL

Special Session: The Importance of Functional Diversity (FD) for Biodiversity Conservation Planning

Chair: David Ehlers Smith, UKZN

FD for conservation: an overview of concepts, applications and outcomes	David Ehlers Smith, UKZN
A multi-taxa FD assessment of the effects of eco-estate development in the mixed land use mosaic of the KwaZulu-Natal north coast	Jarryd Alexander, UKZN
The response of taxonomic and functional bird diversity to forest product harvesting in the Eastern Cape	Jessica Leaver, SUN
Effect of wastewater on avian taxonomic and functional diversity in KwaZulu-Natal	Shannon Reardon, UKZN
The effects of habitat-patch size and patch isolation on the diversity of forest birds in Durban	Mfundo Maseko, UKZN
The influence of landscape-scale determinants in explaining mammalian FD within a mixed land-use mosaic	Yvette Ehlers Smith, UKZN
Promoting functional connectivity of anthropogenically-fragmented forest patches for multiple taxa across a critically endangered biome	David Ehlers Smith, UKZN

SESSION 14 – DINING ROOM

Workshop: Tracking Restoration – Developing a National Ecological Monitoring Protocol to Assess Restoration

Chair: Zoe Brocklehurst, WildTrust

The Department of Environmental Affairs - Natural Resource Management (DEA-NRM) have requested a protocol that will assist in gathering ecological data from all of their project investments. This workshop will provide a platform to engage with the development of a robust, ecologically sound data collection protocol, with discussion around specific indicators and metrics as well as techniques and approaches best suited to our biomes.

<i>Facilitated discussion and workshop regarding Tracking Restoration – Developing a National Ecological Monitoring Protocol to Assess Restoration</i>	Zoe Brocklehurst, WildTrust, Andrew Whitley, WildTrust, Tony Knowles, Cirrus Group
--	--

13H00 – 14H00 LUNCH



13H00 – 14H00 LUNCH

14H00 – 15H30

SESSION 15 – RHOLANDS HALL	
Special Session: Co-Management of the Natural Environment: Challenges, Lessons and Success Stories	
Chair: Kevin McCann, Conservation Outcomes	
Guidelines on community engagement in transfrontier conservation areas	Rabson Dhlodhlo, MDTP
To what extent can national parks realistically and effectively drive a community development agenda?	Hendrik Coetsee, NWU
Towards the implementation of co-management governance in Silaka Nature Reserve, Eastern Cape	Mzwabantu Kostauli, ECPTA
The long walk to an equitable co-management model in KZN protected areas	Phindile Xulu, Ezemvelo
Southern ground-hornbill (<i>Bucorvus leadbeateri</i>) persistence beyond protected areas in southern KwaZulu-Natal: the importance of indigenous knowledge in conservation planning	Yvette Ehlers Smith, UKZN
<i>Facilitated Discussion of Co-Management of the Natural Environment: Challenges, Lessons and Success Stories</i>	Kevin McCann, CO

SESSION 16 – CHAPEL	
Threatened Species Conservation	
Chair: Roelie Kloppers, WildTrust	
Has being strategic made a difference to amphibian conservation research in South Africa?	Jeanne Tarrant, EWT
Implementation of the Biodiversity Management Plan for Pickersgill's reed frog (<i>Hyperolius pickersgilli</i>)	Adrian Armstrong, Ezemvelo
Survival, movement and habitat use of wattled cranes (<i>Bugeranus carunculatus</i>) based on ringing, resighting and aerial survey data in South Africa	Lara Jordan, Vulpro
Trends in hippopotamus population numbers in Ndumo Game Reserve, South Africa	Camille Fritsch, UKZN
Translocation of Cape vultures (<i>Gyps coprotheres</i>) and spatial movement patterns	Lara Jordan, Vulpro
Recent collapses of the Benguela's endemic seabirds off western South Africa - understanding and mitigating threats	Robert Crawford, DEA

SESSION 17 – DINING ROOM	
Special Session: Invasive Species Data Capture and Reporting	
Chair: Heather Terrapon, SANBI	
The future of the Southern African Plant Invaders Atlas	Heather Terrapon, SANBI
ArcGIS collector and how it can be used to map invasive species	Nkhume Ramavhunga, SANBI
Aligning data capture and reporting between local authorities and conservation entities	Tendamudzimu Munyai, SANBI
<i>Facilitated discussion on the way forward for Invasive Species Data Capture and Reporting</i>	Heather Terrapon, SANBI

15H30 – 16H00 AFTERNOON TEA



15H30 – 16H00 AFTERNOON TEA

16H00 – 17H30

SESSION 18 – RHOLANDS HALL		SESSION 19 – CHAPEL		SESSION 20 – DINING ROOM	
Economic Incentives		Mitigating Threats to Biodiversity - Wildlife Crime		Mitigating Threats to Biodiversity - Invasive Alien Species	
Chair: Kevin McCann, Conservation Outcomes		Chair: Ian Little, Endangered Wildlife Trust		Chair: Ingrid Nanni, SANBI	
The win-win potential of the South African game meat market	Cilla Pickering, CO	KwaZulu-Natal rhino crime	Cedric Coetzee, Ezemvelo	House crow (<i>Corvus splendens</i>) eradication measures from eThekweni Municipality, KwaZulu-Natal, South Africa	Bheka Nxele, eThekweni
A proposed wildlife certification scheme for South Africa	Jane Turpie, UCT/Anchor Environmental	A proposed novel tri-lateral approach to combating rhino poaching	Jabulani Ngubane, Ezemvelo	Working Groups and their value in managing biological invasions	Reshnee Lalla, SANBI
Discussion session: Conservation sector input into the proposed wildlife certification scheme	Jane Turpie, UCT/Anchor Environmental	Fat, juicy plunder: the online trade in South African succulents	Laaiah Jabar, SANBI	An Automated Management Unit Control Plan (MUCP) tool	Andrew Wannenburg, DEA
Wrap up and way forward regarding protected area sustainability and co-management	Kevin McCann, CO	Jaws online: probing the trade in white shark jaws on the internet	Zwelakhe Zondi, SANBI	Invasive alien plant species, fragmentation, and scale effects on urban forest community composition in Durban, South Africa	Lindani Mavimbela, UKZN
		Tracing origin of dragons: the sungazer (<i>Smaug giganteus</i>) example	Desire Dalton, NZG SANBI	Predicting avian dispersers of the invasive shrub <i>Lantana camara</i> from bird and plant functional traits	David Ehlers Smith, UKZN
		Facilitated discussion of Mitigating Threats to Biodiversity – Wildlife Crime	Ian Little, EWT	Diets of <i>Tarebia granifera</i> and <i>Melanooides tuberculata</i> found at St Lucia Estuary using stable isotopes	Jamila Janna, UKZN

18H00 – 21H00 QUIZ EVENING

07H30 - 08H30 SYMPOSIUM REGISTRATION FOR DAY DELEGATES

08H30 – 10H30

SESSION TWENTY ONE – RHOLANDS HALL

THURSDAY PLENARY

CHAIR: OSCAR MTHIMKHULU, EZEMVELO

The National Biodiversity Assessment 2018	Carol Poole	Biodiversity Research, Assessment and Monitoring Division, South African National Biodiversity Institute
National Biodiversity Framework	Santhuri Naidoo	Directorate: Biodiversity Conservation, Department of Environmental Affairs
Evaluating the potential returns to investing in green urban development in Durban	Dr Jane Turpie	University of Cape Town / Anchor Environmental
The effects of rapid population growth and lack of planning on groundwater and coastal lake water quality in Maputaland	Prof Guy Bate	Department of Botany, Nelson Mandela University



SOUTH AFRICA'S NATIONAL BIODIVERSITY FRAMEWORK 2017 - 2022

The National Biodiversity Framework provides for an integrated, co-ordinated and uniform approach to biodiversity management by organs of state in all spheres of government, non-governmental organisations, the private sector, local communities, other stakeholders and the public. It also identifies priority areas for conservation action and the establishment of protected areas. It is clearly an important framework document for the conservation sector. The draft NBF for 2017-2022 has been published and members of the public have until 16 November 2018 to submit written representations or objections. Members of the public are invited to submit to the Minister, with 30 (thirty) days after the publication of the notice in the Gazette, written representations, or objections to the National Biodiversity Framework.

10H30 – 11H00 MORNING TEA



10H30 – 11H00 MORNING TEA

11H00 – 13H00

SESSION 22 – RHOLANDS HALL		SESSION 23 – CHAPEL		SESSION 24 – DINING ROOM	
Conserving in the Face of Global Change		Protected Area Management Effectiveness		Special Session: Bridging the Research-Management Gap in the Natural Resources Management Sector I	
Chair: Simangele Sithole, Ezemvelo		Chair: Jabulani Ngubane, Ezemvelo		Chair: Dave Cox, Institute of Natural Resources	
Evaluating ecosystem-level anthropogenic impacts in the St Lucia estuary using ecological network analysis	Christopher Waspe, UKZN	Changing our thinking and challenging our assumptions: the identification of key risks facing conservation in South Africa through the application of Theory of Change (ToC)	Reece Alberts, NWU	Bridging the gap between Natural Resources Management research and management: insights from the KwaZulu-Natal Strategy and the Tsitsa Project	Dave Cox (INR), Mike Powell (RU), Sian Oosthuizen (INR)
A quantitative assessment of ecosystem resilience, using Ecological Network Analysis (ENA): sensitivity of resilience indicators to perturbations in South African estuarine ecosystems	Amy Shurety, UKZN	A decade of Protected Area Management Effectiveness in the City of Cape Town	Julia Wood, CoCT		
Ecosystem modelling of the Thukela Bank under various scenarios of river flow	Melissa Ewels, UKZN	Recent trends in management effectiveness of Ezemvelo KZN Wildlife protected areas	Craig Mulqueeny, Ezemvelo	<i>Five presentations linked to research themes, each with a discussion, to follow for the remainder of Session 24 and Session 27</i>	
The major abiotic drivers of coral population structure in Sodwana Bay, iSimangaliso Wetland Park, South Africa	Roxanne Zunckel, UKZN	Factors influencing management effectiveness of alien plant control programmes in Table Mountain National Park	Nicola van Wilgen, SANParks		
Thermal adaptation of corals to an intertidal habitat	Sandile Ntuli, UKZN	METT assessments for biodiversity stewardship sites – a tool for landowner management support	Kevin McCann, CO	Towards collective learning approaches for natural resource management practices in complex socio-ecological systems: the case of invasive alien plant management in the Blyde Catchment	Reuben Thifhulufhelwi, AWARD
Transcriptomic responses to heat stress and bleaching in two coral holobionts of the KwaZulu-Natal coast	Christine Onyango, UKZN	Hitchhikers' guide to the legal context of protected area management plans in South Africa	Magda Goosen, Ezemvelo	Opportunities for participation in rehabilitation and Sustainable Land Management (SLM) - an assessment of the need for rehabilitation	Benjamin vd Waal, RU
The distribution and abundance of larval brachyurans in the nearshore coastal environment of KwaZulu-Natal	Njabulo Mdluli, UKZN	Terrestrial Assessment Protocol (TAP): management effectiveness as it relates to drivers of degradation in forestry plantations	Lize Joubert-van der Merwe, SUN	Ecological infrastructure (EI) in the context of water security in the uMngeni catchment	Pearl Gola, SANBI

13H00 – 14H00 LUNCH



13H00 – 14H00 LUNCH

14H00 – 15H30

SESSION 25 – RHOLANDS HALL		SESSION 26 – CHAPEL		SESSION 27 – DINING ROOM	
Special Session: Marine Plastics		Special Session: Climate Change and Protected Areas		Special Session: Bridging the Research-Management Gap in the Natural Resources Management Sector II	
Chair: Rachel Kramer, WildOceans		Chair: Ian Rushworth, Ezemvelo		Chair: Dave Cox, Institute of Natural Resources	
Coastal clean-ups, costs and consequences in the seas	Gan Moodley, UKZN	Modelling approaches to support conservation in a changing climate	Guy Midgley, SUN	Participatory governance as a pathway to sustainability after Natural Resource Management (NRM) interventions	Margaret Wolff, RU
Increasing global temperatures and microplastic concentrations: the little but big environmental problem	Oladimeji Iwalaye, UKZN	<i>Vachellia sieberiana</i> : a high altitude encroacher?	Jennifer Russell, UKZN	An Automated Management Unit Control Plan (MUCP) tool	Andrew Wannenburg, DEA
Mechanical beach cleaning or microplastics: the lesser of two evils?	Deborah Robertson-Andersson, UKZN	Assessing the vulnerability of South Africa's protected areas to climate change	Kevin Coldrey, Anchor Environmental	<i>Facilitated discussion and workshop around Bridging the Research-Management Gap in the Natural Resources Management Sector</i>	Sian Oosthuizen, INR
Microplastic pollution in the Knysna estuary: impacts on syngnathids and larval fish	Merrisa Naidoo, UKZN	Climate change mitigation: What role for wildlife?	Liza le Roux, NMU		
The effect of different concentrations of microplastic fibres on the filtration and ingestion rates of oysters <i>Saccostrea cucullate</i>	Masha Ramsamooch, UKZN	Climate Adaptation Methodology for Protected Areas (CAMPA) – innovative tool applied in Marine Protected Areas	Harisoa Rakotondrazafy, WWF Madagascar		
The influence of oceanographic and meteorological conditions on nurdle dispersion following the Durban harbour nurdle spill of 10 October 2017	Lisa Guastella, Bayworld	Developing climate-smart strategies using the Open Standards for the Practice of Conservation	Genevieve Pence, CapeNature		

15H30 – 16H00 AFTERNOON TEA

15H30 – 16H00 AFTERNOON TEA**16H00 – 17H30****SESSION TWENTY EIGHT – RHOLANDS HALL****CLOSING PLENARY**

In a continuation of the sustainable use theme two contemporary, contentious and ultimately critically important conservation issues, namely proposals to use a legalised trade in ivory and rhino horn to conserve elephants and rhinos, will be presented and discussed. The final part of this session will summarise the key lessons, findings and way forward emanating from the presentations and discussions during the symposium, and will guide the conservation agenda going forward.

Why has Southern Africa been so ineffective at CITES in securing the right to trade legally in raw ivory?	Rowan Martin
The rhino crisis – the unavoidable pragmatic solution	Dr George Hughes
Taking stock: key messages and future conservation direction emanating from the Symposium	Steering Committee

18H30 – 22H00 GALA DINNER AND AWARDS CEREMONY**WHERE YOU WILL BE ENTERTAINED BY STAND-UP COMEDIAN NEIL GREEN**

After several years on the Durban Comedy scene, Neil Green easily stands out as one of Durban’s most popular comedy acts. A prolific comedy writer, the man literally has “jokes for days”. His sharp wit, commanding stage presence, and hilariously honest, introspective brand of comedy have won him legions of fans throughout Durban and beyond. Green debuted his highly successful One-Man Comedy Show (“I’m Ill!”) at Durban’s Bat Centre in 2012 and has been on the rise ever since. He has performed at the Playhouse, The ICC, The Suncoast Supernova and a long list of theatres and premier venues throughout KZN.

His comedy ethos is one of introspective authenticity. He steers away from current affairs and pop culture references, and sticks to first person observations and opinions. A strong proponent of the right to free speech, Neil is never afraid to call a pot black, and is sometimes described as edgy or even controversial.

Call it what you will, but this guy makes people laugh. Hard. He has shared the stage with some of the country’s top acts, including Carvin Goldstone, Richelieu Beaunoir, Dusty Rich, Jem Atkins, Glen Bo, Neville Pillay and scores of others.

