



ICCB 2023 Post Symposium Reports

Symposium Title: IUCN Red List of Ecosystems in Africa, Application in Policy, Practice and Planning

Report Author: Somaya Ghoraba

Report:

The IUCN Red List of Ecosystems (RLE) has been applied extensively since its adoption by the IUCN in 2014, with over 4200 ecosystems assessed across marine, terrestrial and freshwater realms. The session comprised a combination of pre-selected presenters who demonstrated RLE assessments from Rwanda, Malawi, Mozambique, South Africa, and Egypt. Presenters highlighted the importance of ecosystem mapping in supporting restoration and conservation of Biodiversity. The presenters emphasized the importance of regional partnership. Most of the assessments have been carried out as a collaboration between institutes in different African countries, which allows countries to meet their development goals through knowledge exchange, building capacities, and sharing expertise. The RLE has been addressed as complementary to the Red List of Species. However, both look at different levels of ecological organization. The RLE has been identified as a tool that provided African countries with a strong foundation for achieving the targets of the Post-2020 Global Biodiversity Framework. All Presenters indicated RLE as informative to spatial planning, guiding ecosystem restoration, and influencing decision-making.

The session presenters were:

Thacien Hagenimana, from the Center of Excellence in Biodiversity, Rwanda, Dickson Mbeya from Malawi University of Science and Technology, Vanessa Rathone, Wildlife Conservation Society, Maphale Monyeki, South Africa National Biodiversity Institute, Somaya Ghoraba, IUCN Commission on Ecosystem Management, Switzerland.

Symposium Title: The Evolving Role of Zoo-based Conservation Organizations in Global Conservation (*including Aquariums and Botanic Gardens)

Report Authors: Angela Yang and Lynn Von Hagen

Report:

One of the most important themes from the symposium emerged in the opening by Dr. Jon Paul Rodriguez, the Chair of the IUCN's Species Survival Commission, in that zoos have an important role in protecting biodiversity across the planet. Traditionally, this has manifested as involvement in maintaining populations of Critically Endangered or Extinct in the Wild species ex situ. However, zoos do much more than captive breeding and reintroduction. Zoos also have differing and increasing roles



outside of their facilities with on-the-ground activities or partnerships supporting in situ conservation, though the public is often unaware of these roles. As well, Zoos have a unique opportunity to reach large captive audiences through education and awareness-raising, so more focus is being placed on engaging zoo visitors to inspire conservation action in innovative ways. A rich discussion followed the talks that included how zoo identities are being redefined considering shifting public opinion of animals kept in human care, the importance of acknowledging zoos' colonial origins, and the need for increasing the focus on animal welfare. We will be continuing conversations with other ZBCOs to explore how we can collaborate to elevate our voices in the conservation community, and to publish a synopsis of our symposium to be shared with the global conservation and ZBCO communities.

Symposium Title: Knowledge Frontier for the Red List

Report Author: Thomas Brooks

Report:

The IUCN Red List has assessed species extinction risk for >50 years; it encompasses >150,000 species, and is widely used in policy and practice. However, its current resourcing is insufficient for re-assessment at frequencies of < 10 years, which risks the Red List becoming out-of-date and jeopardises its utility, and establishing sustained resourcing will require a multi-year campaign. Our ICCB 2023 symposium therefore explored “knowledge frontiers” to bridge this gap. These propose technological and social innovation to increase the speed and robustness, and decrease the cost, of Red List re-assessments. Different knowledge frontiers are relevant to different aspects of the Red List. For example, application of remote sensing products (eg through the RedList platform) can increase the speed and consistency of application of the Red List A criterion for rapid declines, while harnessing citizen science biodiversity data can strengthen application of the B criterion for small and declining ranges. The application of other knowledge frontiers such as social media analysis and indigenous and local knowledge can also strengthen documentation, for example of threats. Plans to build from the symposium include development of a collaborative working group, funding proposals, and scientific publications, supported by interest from agencies like the Global Environment Facility.

Thomas Brooks (IUCN, Switzerland), Binbin Li (Duke Kunshan Univ, China), Moreno di Marco (Sapienza Univ Rome, Italy), Enrico di Minin (Univ of Helsinki, Finland), Gabriela Lichtenstein (CONICET, Argentina), Simeon Bezeng (BirdLife South Africa)

Symposium Title: Desert Conservation in a Changing World

Report Author: Einat Zahabian

Report:



Our symposium focused on conservation of desert habitats. It was attended by approximately 40 participants and included four talks covering different aspects of desert conservation. The participants were very engaged and asked many questions, and the overall impression and feedback from the audience was excellent. As far as we know, no new contacts or research was initiated following the symposium, but we were told by several participants that they were very pleased that desert habitats finally got some attention in the ICCB conference.

Symposium Title: Use of the Spatial Monitoring and Reporting Tool (SMART) and Other Integrated Technologies for Improving Management Effectiveness of Protected Areas

Report Author: Antony Lynam

Report:

The SMART Partnership organized a 3-hour symposium that brought together practitioners using SMART, Earth Ranger and other conservation technologies in Africa, to discuss current uses and applications for enhancing the effectiveness of management of protected and conserved areas. Ten speakers presented in four sessions; 1) overview and history of SMART, 2) case studies, 3) encouraging uptake and building capacity, and 4) adaptive management. The symposium was held in a large capacity meeting room at KCC and was well attended. We estimate at least 150 participants during the first part of the symposium. A panel discussion following the spoken sessions was an opportunity to follow up on some of the topics raised during the symposium, and an opportunity for participants to ask questions of experts. A number of participants stayed on to meet speakers and panelists for one on one discussions. This included several individuals representing organizations Africa and Australia who have expressed interest in setting up new deployments for both SMART and Earth Ranger.

Objective: To provide a forum for discussing the use of SMART and other integrated technologies for improving the management of protected and conserved areas.

- To highlight the benefits of using SMART and other integrated technologies for monitoring and reporting on the status of protected and conserved areas
- To showcase case studies of the use of SMART and other integrated technologies for wildlife conservation in Africa
- To discuss the challenges and limitations of using these technologies in protected and conserved areas and identify potential solutions

Conservation significance: This symposium provided a valuable platform for discussing the use of SMART and other integrated technologies for improving the management of protected and conserved areas, with a focus on wildlife conservation in Africa. The presentations and discussions provided valuable insights into the benefits and challenges of using these technologies, and helped to identify potential solutions for improving the management of protected and conserved areas.



Symposium Title: Establishing a Network for Quantitative Ecology in Africa

Report Author: Natasha Karenyi

Report:

The “Establishing a Network for Quantitative Ecology in Africa” Symposium was held on 26 July 2023 and was attended by 15-20 people moving in and out over the three-hour period. The initial symposium consisted of 5 speakers who highlighted how quantitative ecology has been used to answer conservation-related questions in Africa. It was evident that expertise exists but that there is a lack of collaboration between African institutions. Another challenge is a lack of formal training. However, it was clear that quantitative ecology has been used to turn data into evidence for decision making including red-listing of species, understanding the impacts of drought and in future the development of ecosystem classifications. This was followed by a discussion around what such a network should offer its members, what are the needs of our fellow African researchers and how this network would address those needs. Many excellent discussion points were raised and it was agreed that a website would be a great platform for communication, connection and collaboration. We decided on the next steps for this network and are currently working to develop a Conversation Africa article that will serve as advertising for the network and the website (which will be made public once it has been populated with more information). It was a wonderful opportunity to expand our network of quantitative ecologists in Africa.

Symposium Title: Rewilding the Anthropocene: What are we doing and is it wise?

Report Author: Hanna Pettersson

Report:

The LCAB-led symposium combined theoretical, philosophical and practical perspectives to explore the topic of rewilding across the humanities, social sciences and natural sciences. The presentations were divided in 2 sections; one focussed on the past/present and one on the future. Each yielded dynamic discussions between the panel and the audience on rewilding versus restoration, findings and impacts of the rewilding projects and reintroduction of species, and why and how to rewild, and the future envisioned by rewilding. Overall, the LCAB-led symposium highlighted the challenge of defining rewilding, setting baselines for ecosystem or species restorations, defining successes in rewilding and the impacts of future technologies required to make rewilding sustainable in the long term. Researchers at LCAB are approaching these questions through ongoing research on rewilding as well as on broader biodiversity issues that would be applicable to addressing these challenges. Following the symposium, we are planning an edited volume of essays (book format) that explore these topics further.

Symposium Title: Combining Evidence for Decision-Making and Learning in Conservation



Report Author: Nicolas Boenisch

Report:

The symposium "Combining Evidence for Decision-Making and Learning in Conservation" concluded with notable participation and engagement. Organised by Nicolas Boenisch, William Sutherland and Stephan Funk, with crucial contributions from speakers Charlotte Karibuhoye Said and William Morgan, it fostered meaningful conversations about enhancing conservation decision-making.

Participants engaged in discussions focusing on integrating existing and new evidence into conservation practice. The Conservation Learning Initiative was showcased, suggesting a five-step approach that combines evidence from diverse sources to enhance decision-making processes.

The dialogue was centred on actionable steps to access and utilise the rich yet often underutilised reservoirs of information within organisational systems and experiential knowledge. The shared objective was to ignite an 'evidence revolution,' aiming to optimise the collection, synthesis, and application of knowledge in real-world conservation contexts.

The symposium aligned with the ICCB 2023 theme, emphasising the immediate need to implement evidence-based strategies to sustain biodiversity effectively. Participants, including practitioners and academics, left with a renewed commitment to bridging the gap between evidence and practice, marking a step forward towards a future where informed, effective conservation practices are the norm.

Symposium Title: How Can Online Biodiversity Data Platforms Be More Useful to African Stakeholders?

Report Author: Falko Buschke

Report:

The symposium and roundtable discussion was held in a room smaller than we anticipated and was, therefore, attended by fewer people than we had planned for. In hindsight, this was for the best because it led to a more intimate event with deeper engagement and discussion. The outcome of the event was that all participants agreed to contribute to a Commentary piece titled "Ensuring that global biodiversity information is useful to national decision-makers". A manuscript has already been submitted for review, which included inputs from 21 authors representing 19 different institutions (two-thirds of these from within Africa). The goal is for this article to coincide with the 25th meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) of the Convention on Biological Diversity in Nairobi on 16-20 October 2023. We hope that the contents of the article will frame the discussions around the monitoring framework for Targets 20 and 21 of the Kunming-Montreal Global Biodiversity Framework (GBF) and the open call for expressions of interest to host regional scientific and technical support centres for the GBF. Overall, we consider the symposium and roundtable discussion a complete success.



Symposium Title: The Power of Zoo Partnerships to Respond to Biodiversity Challenges: Inspiring and Engaging Local and Global Communities

Report Author: Chase LaDue

Report:

We believe our symposium on zoo-conservation partnerships was a success, as we shared during the meeting multiple ways that zoos contribute to field conservation. Specifically:

- Sunny Nelson (Lincoln Park Zoo) shared how her institution has engaged with local governments to address the Asian songbird crisis.
- Representatives from the Cheetah Conservation Fund shared how zoo resources and expertise has helped their organization actively combat the illegal cheetah cub trade.
- Chase LaDue (Oklahoma City Zoo) shared an example of how wildlife research can benefit from a complementary "field to fence" approach, and how this approach may be applied to directly impact management.
- Emily Geest (Oklahoma City Zoo) shared how her facility engages local communities to become conservation actors, and how conservation knowledge and intent may be measured in the long-term.
- Kristen Lukas (Cleveland Metroparks Zoo and Dian Fossey Gorilla Fund) shared the importance of empowering women in conservation, and how she has implemented personal coaching to help conservation practitioners achieve their professional goals.

We are still buzzing after the conference, and we have plans to collaborate with representatives from another ICCB symposium on zoo-based conservation organizations to produce an output. This will likely take the form of a paper sharing challenges and successes of zoo-conservation partnerships.